

Mid-Missouri Affiliate of
Susan G. Komen for the Cure®



COMMUNITY PROFILE REPORT

The Mid-Missouri Affiliate of Susan G. Komen for the Cure® Community Profile 2009

Acknowledgements

The Mid-Missouri Affiliate of Susan G. Komen for the Cure would like to thank the following individuals for their contributions to the Community Profile:

Patricia A Nugent, Director, Grants and Education, St. Louis Affiliate of Susan G. Komen for the Cure for her assistance and advice during the project

Melodie Wilson, Mid-Missouri Affiliate Volunteer for her assistance in reaching out to contacts in our targeted counties, conducting interviews, and expanding awareness of the Susan G. Komen organization in the Mid-Missouri Affiliate region.

Mid-Missouri Affiliate Board of Directors and especially **Iris Calloway**, President, for their ongoing support of this project.

Lori Maris, Executive Director, Greater Kansas City Affiliate of Susan G. Komen for the Cure for providing us with names of Race for the Cure participants that lived in our service area.

Catherine Oliveros, Manager Community Health, Susan G. Komen for the Cure National Office for her advice and direction on this project.

David McBride, Data manager, ShowMe Healthy Missourians Programs, Department of Health and Senior Services for providing us data on SHMW program's utilization in our counties.

Prepared by:

Jane A. McElroy, PhD
(Grants Committee Volunteer)
Assistant Professor
Family and Community Medicine Department
University of Missouri

Jessica Allhoff (Intern)
MPH Candidate
Masters of Public Health Program
University of Missouri

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Executive Summary

Introduction

The Mid-Missouri Affiliate of Susan G. Komen for the Cure® was founded in 2006 by the concerted efforts of five Boone County women with a variety of connections to breast cancer. The Mid-Missouri Affiliate of Susan G. Komen for the Cure—along with those who generously support us with their talent, time and resources—is working to better the lives of those facing breast cancer in our community. The Komen Mid-Missouri Affiliate Community Profile is a tool designed to help determine our community’s area of needs and assists in providing direction to the Organization as to where they can have the most significant impact in the eradication and education of breast cancer.

The Community Profile guides the following Affiliate activities:

- Promotion of inclusion efforts in the breast cancer community
- Guidance in community grant priorities
- Informing public policy efforts
- Determining outreach and education needs
- Informing fundraising efforts

This information can also be used by other community organizations for the following:

- Program planning and service delivery
- Grant writing
- Opportunities for expanded referrals and inter-agency collaborations

The Mid-Missouri Affiliate relies on information obtained through the Community Profile Report to guide the accomplishment of the promise to end breast cancer forever in its communities, providing a road map for future Mission program planning. The Community Profile relies on the generosity and dedication of a community of experts and professionals at every step of the way. Tapping into these resources in Mid-Missouri Affiliate Area, the Affiliate Community Profile Team conduct interviews, gathered data and wrote this report.

Overview Demographic and Breast Cancer Statistics

Currently, the Mid-Missouri Affiliate serves a 15 county area, including Adair, Audrain, Boone, Callaway, Camden, Chariton, Cole, Cooper, Howard, Macon, Maries, Miller, Moniteau, Morgan and Randolph. All but two of the fifteen counties, Boone and Cole, are considered rural and are at least \$10,000 below the state average median household income (2007) of \$45,012. The total estimated population of our service area is 519,439, of which half are female. While on average, 14 percent of Missourians have no health coverage, Miller and Morgan counties have over 25 percent without coverage. Additionally, more than a fourth of Missouri women have not had a mammogram in the last 12 months, over 39 percent of women in Morgan, Marie and Miller counties have not.

In 2008, 3,810 Missouri women were diagnosed with breast cancer and 890 Missouri women died from breast cancer, giving Missouri the 5th highest age-adjusted breast cancer mortality rate in the United States. Unfortunately, while racial disparities in incidence within the Affiliate service area are narrowing, disparities in mortality are widening, according to the Missouri Cancer Registry.

The economics of the state will undoubtedly affect residents in our counties. Missouri's continued reduction in employer-sponsored health coverage at twice the national rate undoubtedly leads to increasing number of uninsured individuals. Unfortunately, breast cancer does not pay attention to the economic climate. The Mid-Missouri Komen Affiliate may be a beacon for those who find themselves in need. In addition, educating women about the importance of screening and breast cancer risk factors will continue to be highly important.

Key Findings

Data for each of the 15 counties was compared to Missouri state data based on breast cancer incidence and mortality as well as demographics, four counties were selected to be targeted for an in depth assessment. These counties were Camden, Chariton, Cole and Morgan counties.

Camden County: has many resources but a high percentage of older women who are less likely to get a mammogram as well as the third highest number of breast cancer cases. While the nation grays, Missouri grays faster and Camden County faster still. The older population concentrates around the Lake of the Ozarks with few services available, especially to this population.

Chariton County: many residents have to travel more than 60 miles for their health care needs; the Health Department does not have the Show Me Health Women program (a program for impoverished women who receive screening services, including clinical breast exams and mammograms).

Cole County: is the seat of the state capitol. Cole County has the highest incidence of cancer and a high mortality rate as well as the highest percentage of African-Americans in the Affiliate service area. In contrast, the percent of *in situ* breast cancer is at the state average.

Morgan County: a growing retiree population coupled with limited health care services. Residents need to travel to Jefferson City, Columbia or the Lake of the Ozarks for tests and specialty services. Older residents face transportation issues due to the distance. Morgan county has persistent pockets of poverty.

Overview of Exploratory Data Key Findings

The Community Profile process completed by the Komen Mid-Missouri Affiliate included a review of breast cancer statistics for the entire area with comparative analysis by county. A focus on four counties (Cole, Morgan, Camden, and Chariton) was also completed. In these counties, numerous interviews to individual key informants and in groups were conducted. We also received completed surveys through emails linked to our web-based surveys, in person, and mailed surveys. In total, we contacted approximately 340 individuals within Cole, Chariton, Camden, and Morgan counties in an effort to gain first person opinions regarding future resource and energy allocations to increase breast health in the Mid-Missouri affiliate region.

Results from Surveys

Survey results from an Encouragement Through Caring (ETC) fund-raising event (n=202 respondents), the majority of women resided in Cole county (66%) with almost all the remaining coming from the Affiliate's surrounding counties of Moniteau, Morgan, Miller, Maries, Osage, Callaway, Boone (33%). For the data collected at the ETC fund raising event, women ranged in age from under 40 (36%), 41-49 (27%), 50-59 (27%), ≥60 (10%); 96% were White and 3% were Black. Over half of the women were married (65%), with 21% single, 12% divorced or separated and 3% widowed. Of the 202 participants, 12% did not report having a primary care physician and 10% of the participants reported not being able to see a physician because of cost. Of the 54 women between 50-59 years old, 9% had never had a mammogram. Of the 153 respondents who answered the question about perceived difficulty in obtaining a mammogram, only 5% reported getting a mammogram as difficult or very difficult.

Survivors (n=35) were asked to indicate the support service they found *most helpful*. The choices were breast prosthetics, complementary therapies, counseling, exercise programs, financial assistance, lymphedema services, nutrition and/or food delivery, patient navigator services, referrals to outside agencies, religious and/or prayer groups, resource centers/libraries, support groups and/or other survivors, transportation, and wigs and/or hats. All services were marked by at least one person, except for transportation, patient navigator services and complementary therapies; these received no votes. Services that were considered the most helpful were support groups or other survivors (28%), wigs and/or hats (15%), lymphedema services (10%) and 8% for breast prosthetics, resource centers/libraries, and religious and/or prayer groups.

One question was asked of our different groups, "With the goal of eliminating breast cancer, where do you think energy and resources should be directed?" Mammograms & Clinical Breast exams (at 68%), Breast Cancer Awareness (at 52%) and Breast Cancer Education (at 46%) were the three top priorities of our surveyed individuals. The providers (n=27) had slightly different priorities with financial assistance during treatment (52%), mammograms and clinical breast exams (48%) and prescription assistance (44%) consistently ranked as the top three areas. It may be that the physicians, who interact with the range of patient population, are exposed to those in need and find limited services available. Further, the survivors' (n=35), residents' living in low income

housing (n=14) and the general public's (n=185) responses may be biased since we collected most of these data at a fund raising event which cost \$10 to attend.

Results from in-person interviews

One of our major discoveries we made from our interviews was that directors/managers of outreach programs, who interacted with underserved/uninsured/impooverished populations and managers of programs that provided resources to these same populations were often unaware of each other; this held for programs within the same county and even located in the same city.

The findings from the health department/agencies discussion seem to support the data from the asset mapping, which noted that many of the Affiliate's rural counties are lacking permanent mammography facilities. The discussion showed that at least some of these rural health departments rely on mobile vans to provide mammography services. The Ellis Fischel Mobile Van, which is partially supported by a Mid-Missouri Affiliate grant, was frequently cited as a wonderful resource as well as the only resource for mammography screening available to some counties.

Another common discussion point was the current economic climate and its impact. There was a fear that those who were doing just okay would move into the category of needing assistance but would not qualify for the existing programs. People in rural communities who have catastrophic insurance or very high deductibles will be unlikely to obtain a mammogram during this period of belt tightening.

The physicians are beginning to see more patients who have lost their jobs and an increase in self-pay. Urgent care walk-in has increased which suggests that people are only receiving care in urgent situations. Currently, some clinics are recommending people call in before their appointment with their insurance information so that the health care team knows what is covered and what their patients can afford before scheduling procedures or tests.

All of the health departments spoke of being stretched and having competing priorities as part of their job duties. In Chariton County, it was noted that one person is in charge of 5-7 programs that all demand considerable time. To implement a new program means writing a grant, this takes time in an already packed workday.

Another concern mentioned by several informants was a lack of transportation for rural residents. For the senior citizen groups, that meant no transportation to the mobile mammography van. For others that translated into lack of transportation for treatment, particularly when it was a frequent repeat appointment.

Interviewees mentioned several barriers that minorities may face in obtaining breast health care in the predominately white communities of the Mid-Missouri Affiliate Area. One barrier is the lack of similarly colored individuals providing breast health care. This is compounded by few female health care providers in our region. Finally, there is a

common myth that breast cancer is a white woman's disease and therefore not germane to Black women.

Affiliate Priorities

After reviewing the data, the Community Profile Team made recommendations to the Mid-Missouri Affiliate Board of Directors in the form of Affiliate Priorities. These priorities and objectives will provide guidance for the Affiliate over the next two years.

Priorities

1. Continue Komen Mid-Missouri Affiliate efforts to increase breast health care outreach and education, breast cancer screenings and diagnostics, and quality breast health care services for uninsured/underserved women.
2. Increase awareness of the Komen organization in the Mid-Missouri Affiliate area, especially the funding opportunities available to organization.
3. Continue Public Policy Initiatives to insure adequate funding for Missouri's SMHW Program and explore opportunities to address BCCT access.

Organizations, researchers and governmental agencies across the country and around the world are waging an intense battle against this disease. The Komen Mid-Missouri Affiliate is proud to play a role in this community and is dedicated to supporting local organizations working to provide individuals, particularly those in underserved communities, with vital outreach, education, screening, treatment and support services.

Introduction

Affiliate History

Nancy G. Brinker promised her dying sister, Susan G. Komen, she would do everything in her power to end breast cancer forever. In 1982, that promise became Susan G. Komen for the Cure®, which launched the global breast cancer movement. Today, Susan G. Komen for the Cure is the world's largest grassroots network of breast cancer survivors and activists fighting to save lives, empower people, ensure quality care for all and energize science to find the cures. Thanks to events like the Susan G. Komen Race for the Cure®, Komen has invested over \$1 billion in the past 25 years to fulfill its promise, becoming the world's largest source of private funds dedicated to breast cancer research and the fight against breast cancer. For more information about Susan G. Komen for the Cure, breast health care and/or breast cancer, visit www.komen.org.

The Mid-Missouri Affiliate of Susan G. Komen for the Cure® was founded in 2006 by the concerted efforts of five Boone County women with a variety of connections to breast cancer. In 2006 the Mid-Missouri Affiliate became the third Affiliate in Missouri and joined the 120 Affiliates around the country in the fight against breast cancer. It was at that time the Mid-Missouri Affiliate hit the ground running, holding fundraising events, administering community grants, participating in local education and outreach events as well as contributing to national research.

Since its inception in 2006, the Mid-Missouri Affiliate of Susan G. Komen for the Cure® has raised thousands of dollars in the fight against breast cancer. In the first two years of our local granting program (2007 and 2008), we have invested over \$123,000 in breast health care specific programs for our Affiliate area. Twenty-five percent of the dollars raised in the area, after expenses, have gone to fund the Komen National Breast Cancer Research Program. The Komen Mid-Missouri Community-Based Grants Program supports non-profit organizations and health care organizations that provide innovative, evidenced-based projects in the areas of breast health and breast cancer education, outreach, screening, treatment and support programs targeting services not otherwise available to the medically underserved populations in our service area.

The Affiliate's Community-Based Grants Program is made possible through local events, individual donations and the generous support of corporate sponsors. In 2009 with the anticipated awards of cycle 2 grant applications, the Komen Mid-Missouri Affiliate doubled our funding (over \$100,000) to local non-profit breast health care organizations that share our promise to save lives and end breast cancer forever. For additional information on the Komen Mid-Missouri Affiliate, please visit:

www.komenmidmissouri.org.

Organizational Structure

The Mid-Missouri Affiliate was originally comprised of a 15 member volunteer Board of Directors and advisory committee members made of community leaders. Today we have two part-time staff, 15 Board of Directors members as well as Education, Grants, Finance, Fundraising, Communications, Board Development, Race Organizing, Race, and Volunteer Committees. Mid-Missouri Affiliate's volunteers have helped fund breast cancer education, screening and treatment projects locally and nationally. We rely on the time, talents and treasures of committed volunteers to make it possible for us to be a leader in the fight against breast cancer in the Mid-Missouri area.

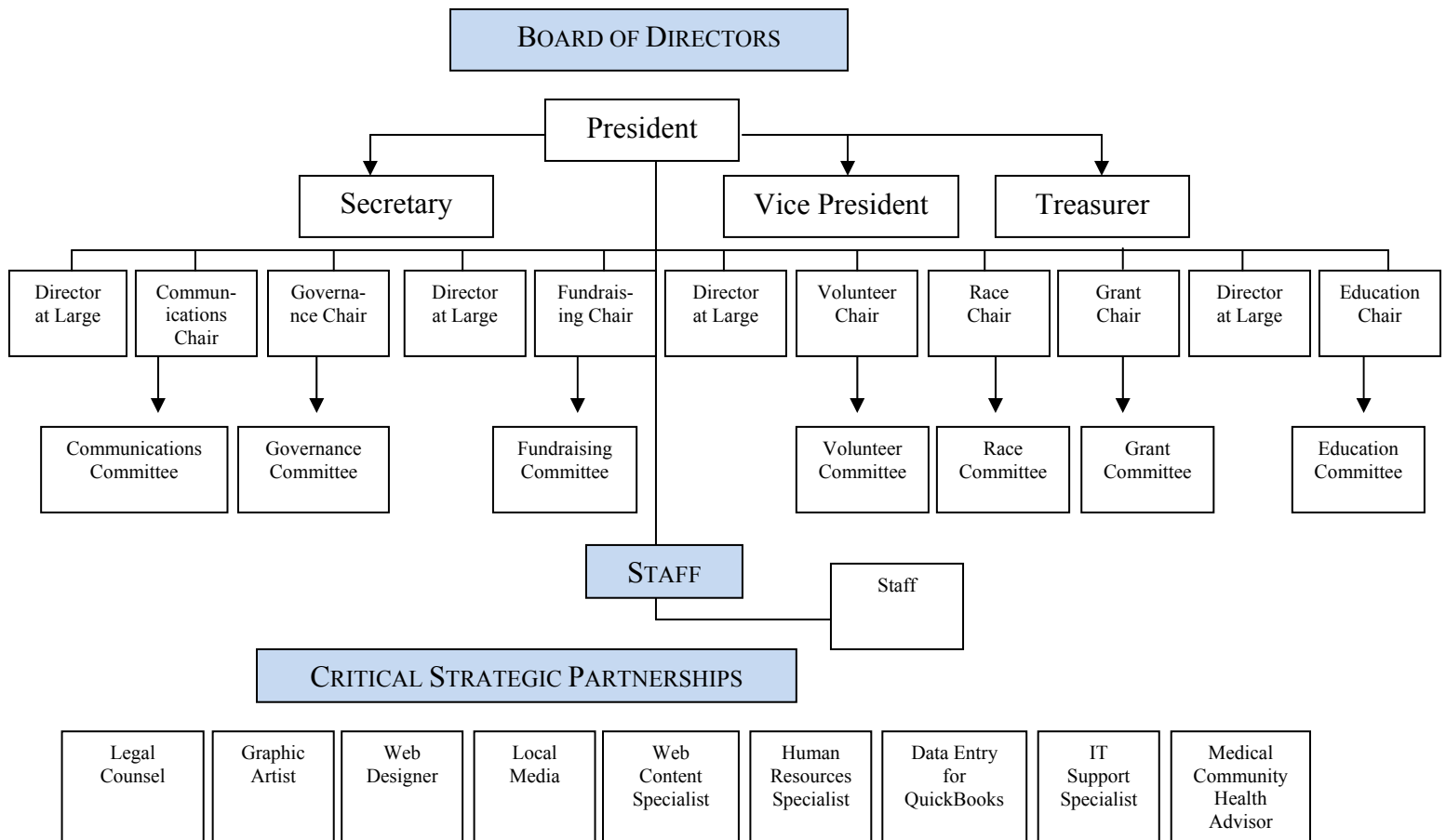


Figure 1. Susan G. Komen for the Cure Mid-Missouri Affiliate® Organizational Structure

Service Area

The Komen Mid-Missouri Affiliate serves a large geographic area located in the central region of the state of Missouri. Our counties include Adair, Audrain, Boone, Callaway, Camden, Chariton, Cole, Cooper, Howard, Macon, Maries, Miller, Moniteau, Morgan, and Randolph. These counties cover approximately 9000 square miles.

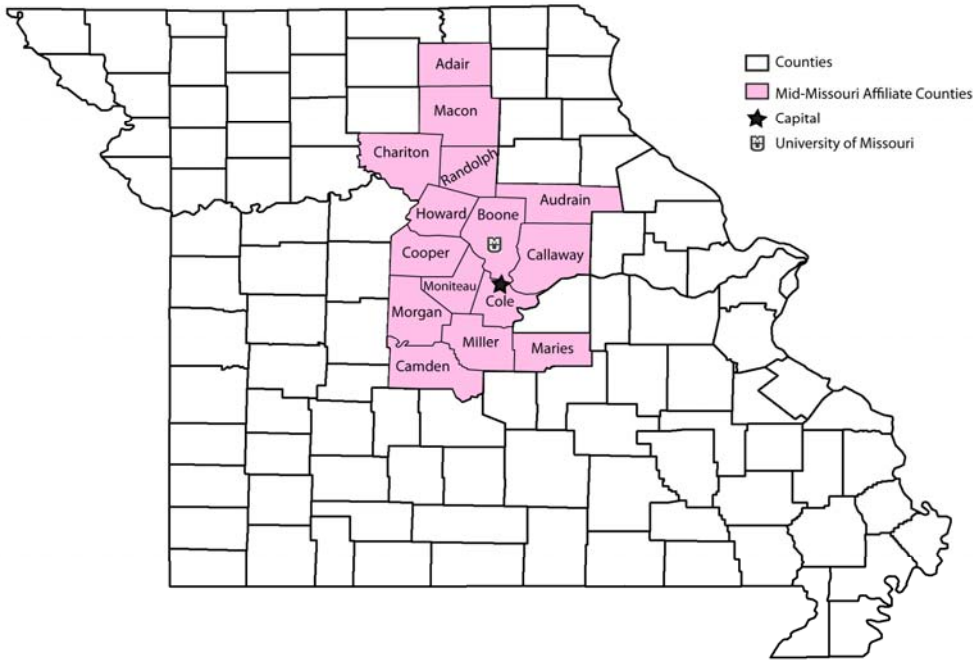


Figure 2. Komen Affiliate Service Area

One of the counties (Cole) in the Mid-Missouri Affiliate contains the state capital in Jefferson City and Lincoln University. Directly north of Cole county are other significant institutions, the University of Missouri-Columbia and Stephens College which are located in Boone county and Truman State University in Adair county. Of our 15 counties all but Cole and Boone County are considered rural with the population density ranging from 11.2 to 56.6 people per square mile. The state average density is 81.2 people per square mile. Similarly, only Boone and Cole counties have median household income (2007) close to the state average of \$45,012. The 13 counties (excluding Boone and Cole County) have median household incomes in the mid \$30, with Callaway's median household income at \$17,005.

The economics of the state will undoubtedly affect residents in our counties. Missouri's 2009 general revenue collections are down almost two percent year-to-date compared to

2008. The net general revenue collections for the month of February 2009 decreased by 10.5 percent compared to the February 2008. State Budget Director, Linda Luebbering suggests the national recession and the current Missouri unemployment rate of eight percent, which is a 25-year high, as reasons for the poor economic situation. The Missouri legislative sessions began in January 2009 and budgets for fiscal year 2010 have not yet been finalized. The deadline for the budget is the first Friday before the end of the session, May 8th 2009. The State of Missouri will face a \$261 million deficit with many programs at risk. For example, institutions like the University of Missouri have instituted a hiring freeze during this economic climate. Missouri's continued reduction in employer-sponsored health coverage at twice the national rate undoubtedly leads to increasing number of uninsured individuals. Unfortunately, breast cancer does not pay attention to the economic climate. The Mid-Missouri Komen Affiliate may be a beacon for those who find themselves in need. In addition, educating women about the importance of screening and breast cancer risk factors will continue to be highly important.

The current economic situation may impact people's generosity in donations to the Mid-Missouri Affiliate although it is too early to tell. We have just been given approval by Headquarters to organize the first Mid-Missouri Race for the Cure® event in 2010, which is a significant fund-raising event. To distribute our funds to local communities, the Affiliate fiscal year 2008-2009 grant funding for the upcoming grant cycle April 1 and July 1, 2009-2010 is at its highest amount in the history of the Affiliate. We awarded four grants in cycle one in April for \$56,366. We have received 9 grant applications in 2009 cycle two with approximately \$300,000 in requests. Cycle 2 awards will be announced in May.

Purpose of Report

The primary intent of the 2009 Community Profile process undertaken by the Komen Mid-Missouri Affiliate was to better understand the community we serve. According to the Susan G. Komen for the Cure 2008 Community Profile Guidebook, a quality Community Profile guarantees that mission and non-mission work is targeted and non-duplicative. In addition, the Community Profile should allow the Affiliate to:

Establish focused Community-Based Grant priorities

- Establish focused community education needs
- Strengthen sponsorship and fundraising efforts by allowing the Affiliate to tell the story about breast cancer and breast healthcare needs in our service area
- Drive public policy efforts
- Establish directions for marketing and outreach
- Align the Affiliate's strategic and operational plan
- Drive inclusion efforts in the community

Demographics & Breast Cancer Statistics

Data Source & Methodology Overview

Median household income was obtained from the United States (U.S.) Census Bureau's QuickFacts for 2007, estimated from the 2000 census. Poverty levels were obtained from the 2007 Small Area Income and Poverty Estimates from the U.S. Census Bureau. Health insurance coverage data were obtained from the 2005 Small Area Health Insurance Estimates (SAHIE) from the United States Census Bureau.

Mammography data and clinical breast exams for Missouri were obtained from the 2007 Missouri Community Data Profile on the Missouri Department of Health and Senior Services (DHSS) website. The survey administered through the Missouri Community Data Profile asked whether women age 40 years and older had ever had a mammogram and if so, if they had a mammogram or clinical breast exam (CBE) in the last 12 months.

Age-adjusted breast cancer incidence rates and incident case numbers for Missouri (1997-2006) were obtained from Missouri Information for Community Assessment (MICA) on the Missouri DHSS website. Age-adjusted breast cancer mortality rates and number of deaths for Missouri from 1996-2006 were obtained from Missouri Department of Health and Senior Services (Death MICA). Because of our sparsely populated counties, we had to combine years of data to obtain counts and age-adjusted rates with 95 percent confidence intervals by county.

Office of Social and Economic Analysis (OSED), social and economic indicators were used to obtain data on percent households below poverty (2005) and 2007 population data by county. We obtained data on percent population age 55 and older, percent population age 65 and older, percent Caucasian, AfroAmerican/Black, and Hispanic.

Using the Health Professional Shortage Primary Care (Department of Health and Human Services) for 2007, we classified counties as partially underserved for the low income population, entire county underserved, or none of the county underserved.

Mammography centers located in the county were indicated and the ShowMe Healthy Women Program, which provides breast care to the impoverished, including mammograms (screening and diagnostic), clinical breast examinations, and covering the costs for breast cancer treatment from the Department of Health and Senior Services (DHSS).

Overview of Service Area Demographics

The Mid-Missouri Affiliate covers 15 counties in the central region of the state. Directly to the east, the St. Louis Affiliate serves 14 counties and to the west the Greater Kansas City affiliate covers 7 counties in Missouri. Of the 115 counties, including the city of St. Louis, Susan G. Komen for the Cure® services 36 Missouri counties (31 percent). When evaluating by number of counties, most of Missouri does not have coverage by a Susan G. Komen for the Cure® Affiliates (n=78 without an Affiliate); however, about 67.7 percent of the people in Missouri are served by an Affiliate (Greater Kansas City = 20.7 percent; Mid-Missouri = 8.8 percent; St. Louis = 38.2 percent).

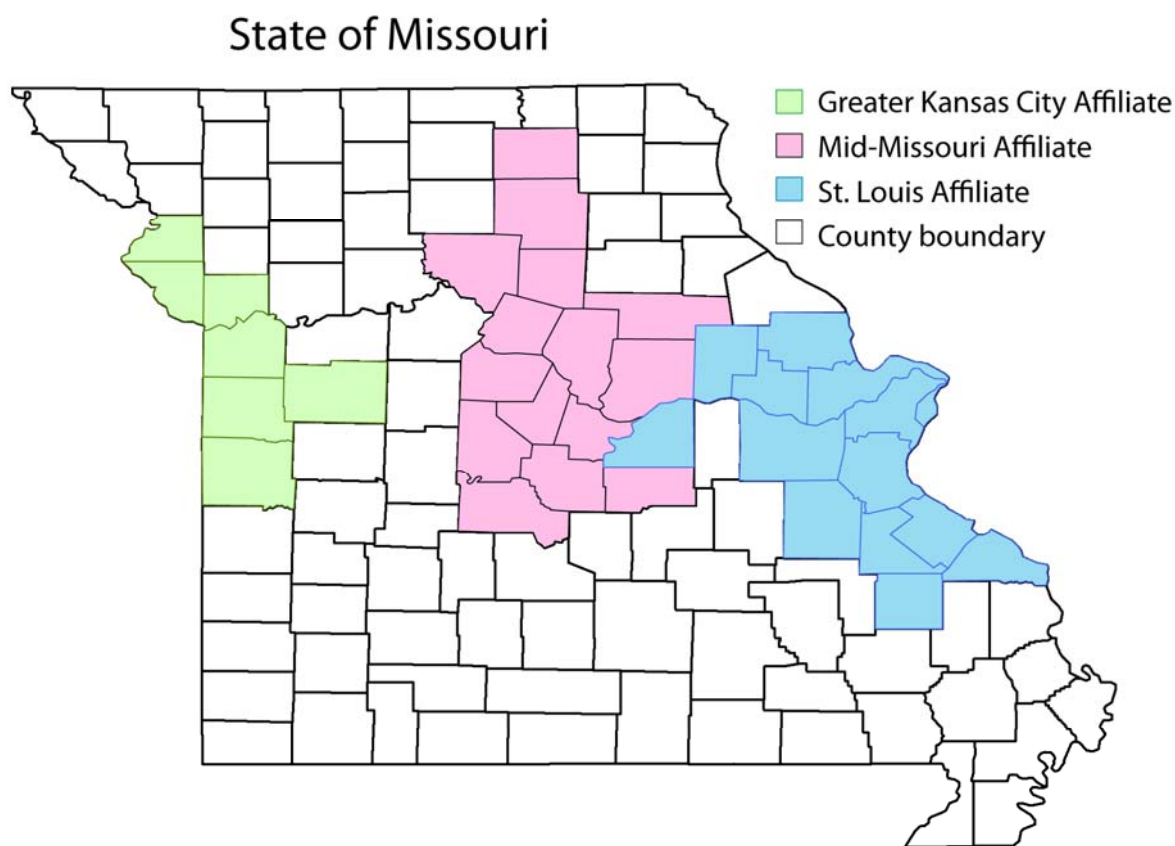


Figure 3. Service area of the three Affiliates in Missouri

In the following bullets, characteristics of the Mid-Missouri Affiliate area are reported and compared to the state averages. The data shows variation in demographic make-up from county to county in our affiliate area.

- The Mid-Missouri Affiliate area contains 8.8 percent of the total estimated 2008 state of Missouri population.
- Of the total population of an estimated 519,439 people in our service area, half are female.

- Overall Missouri continues to show a slow population growth.
- Four counties (Boone, Camden, Morgan and Callaway counties) showed population growth above the six percent state average from 2000-2008 at 14 percent, 10 percent, 8 percent, and 7 percent, respectively.
- Only Chariton County showed substantial population decline from 2000-2008 at -8 percent.
- In 2007 nearly 25 percent of Missouri's population was older than 55-- with Camden, Chariton, Macon, and Morgan all having more than 30 percent of older populations.
- In 2007, Missouri had 13.4 percent people older than 65, Camden had 19.7 percent; Morgan at 20.5 percent; Chariton had the oldest population at 21.9 percent.
- The Mid-Missouri Affiliate area is less racially and ethnically diverse than the state or the nation; it is predominately white (78.6 percent Mid-MO, 74.1 percent MO, 65.9 percent U.S.) with a lower proportion being African-Americans (6.0 percent Mid-MO, 12.4 percent MO, 12.1 percent U.S.). Far fewer are Hispanics (3.5 percent Mid-Mo, 14.7 percent MO, and 14.9 percent U.S.) or Asian and Pacific Islanders (1.9 percent Mid-Mo, 4.3 percent MO, and 4.4 percent U.S.). (Missouri Census Data Center, MCDC)
- Audrain, Boone and Cooper all have black percentages in the eight - nine percent range. Cole county has slightly more with 10.4 percent. Moniteau has a marginally larger Hispanic community at 3.5 percent.
- In Missouri 14 percent have no health coverage. However in Miller and Morgan counties the figure is much higher, both being more than 25 percent.
- The affiliate area also fares better than the nation on education level attainment, with 29.2 percent having a high school degree (U.S. is 28.4 percent).
- There are no low-income mammography centers in Camden, Chariton, Cooper, Howard, Macon, Maries, and Morgan counties.
- In the state, more than a fourth of Missouri women have not had mammograms in the last 12 months. Morgan county was 39.5 percent and Maries and Miller both had more than 40 percent.
- There are shortages of health professionals in all of Chariton and Maries counties.
- The Mid-Missouri Affiliate county's median household income is less to the U.S. but similar to the state's median in 2007; (\$39,844 Mid-Missouri, \$38,153 Missouri, \$60,740 U.S.). (www.census.gov/hhes/www/saipe/)
- Economic disadvantages vary within counties and among counties in Mid-Missouri Affiliate area (Figure 4) with relatively large areas in Macon, Audrain, Moniteau, Morgan, and Camden.

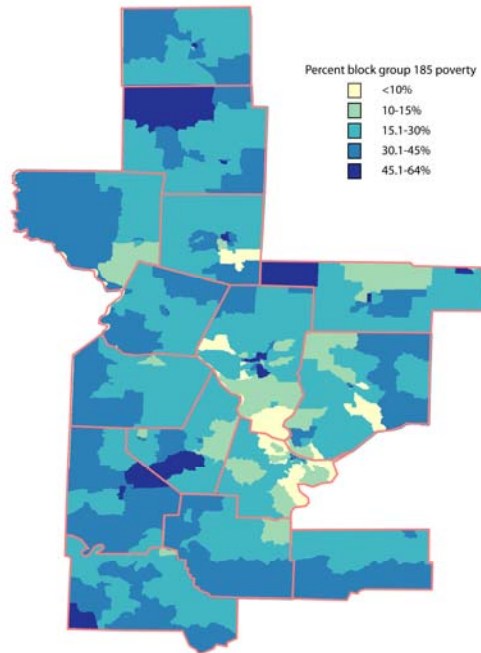


Figure 4. Percent of persons 185 percent poverty by US census block group in Komen Mid-Missouri Affiliate Region

Breast Cancer Statistics

The breast cancer rate is age adjusted so that we can meaningfully compare counties' rate to each other. To standardize the rate, first the number of new cases in each age group (e.g., 20-24 years old, 25-29 years old, ... >85 years old) within a population is divided by the number of individuals at risk (in this case, adult females) in each age group. Next these numbers are multiplied by the "standard" population in each age group (US population in 2000). Finally these numbers for each age group are added up and then divided by the standard population to provide us with an age-adjusted incidence rate. This rate is often multiplied by 100,000 so that we report the rate as a whole number.

The breast cancer mortality rate is calculated in the same way but instead of using new cases of breast cancer in the numerator, the deaths caused by breast cancer is used in the numerator. The denominator for both incidence and mortality is the same. In both cases, a rate is calculated over a specific period of time, such as one year (e.g., 2008 age-adjusted incidence rate). Only female breast cancer incidence and mortality data were collected and analyzed for this report. In this report, all incidence and mortality rates are age-adjusted.

According to the American Cancer Society the female age-adjusted breast cancer incidence rate in Missouri in 2008 is 124.2 per 100,000 persons, which ranks 26th in the nation. In 2008, 3,810 women were diagnosed with breast cancer in Missouri and 890 Missouri women died from it. In 2008, Missouri had the 5th highest age-adjusted breast cancer mortality rate in the United States at 26.6 per 100,000 persons. In Mid-Missouri Affiliate Area, 2003-2005 data on number of cases are available in some but not all counties since few cases are diagnosed with breast cancer in

some of our counties. To maintain confidentiality, a ten-year period was used to show the burden each county faces with breast cancer diagnosis (Figure 5).

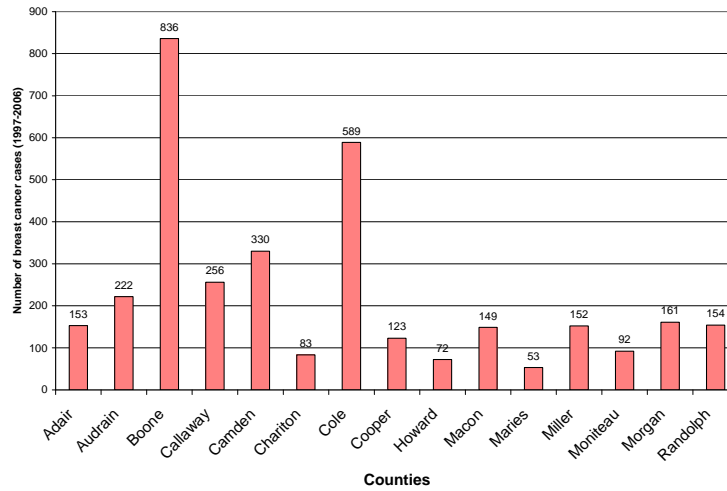


Figure 5. Number of breast cancer cases in 10-year period by county

The number of cases by county can be misleading since it does not take into consideration the population of the county or age structure of the county. Age structure means that since breast cancer risk increases with age, a county that has a higher proportion of older women would be more likely to have a larger number of cases than a county with few older women. In contrast to burden of breast cancer by county as shown by number of cases (figure 5), the age-adjusted incidence rate shows similar rates by county (figure 6). The similarity is depicted in the 95 percent confidence intervals in which the range of values encompass the point estimate of any other county. For example, Cole county has a high rate of breast cancer, at 184 per 100,000 people, yet statistically, this value could also be true for any other county in which the 95 percent confidence intervals are included. That means that this rate could be true for every county except Maries, Miller, and Macon).

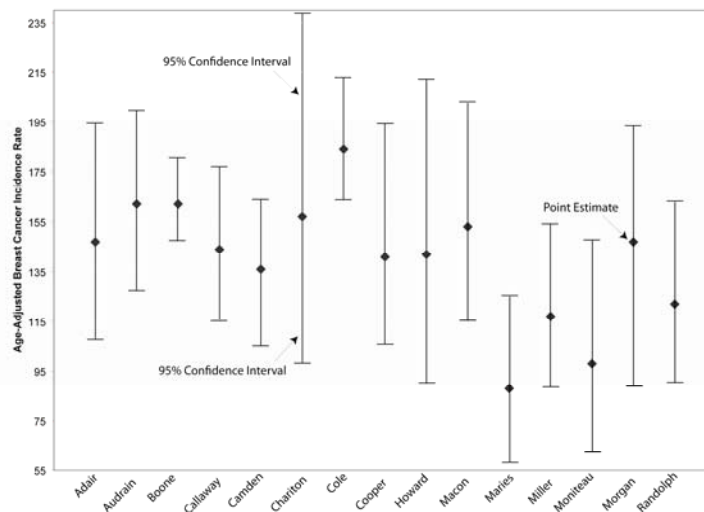


Figure 6. Point estimate and 95 percent confidence interval of age-adjusted breast cancer incidence rate by county

Racial disparities in breast cancer mortality also exist in Missouri. While disparities in incidence are narrowing, disparities in mortality are widening. According to the Missouri Cancer Registry, from 1990-1992 the age-adjusted mortality rate for African Americans was 16 percent higher than whites, but from 2003-2005, it was 53 percent higher.

According to the 2007 Missouri Community Data Profile, the percentage of women in Missouri who reported not having a mammogram or CBE in the last 12 months was 27.6 percent, while 8.7 percent of Missouri women reported never having a mammogram. The national average of women reporting they have not had a mammogram in the past two years was 23.5 percent in 2006, according to national Behavioral Risk Factor Surveillance System data. Of all the Mid-Missouri Affiliate’s counties, six counties did better than the state average for screening.

In situ breast cancer is diagnosed when cancer is found in a duct of the breast and is limited to the inside of the duct, without any breakthrough into surrounding tissue. *In situ* breast cancer is typically treated using lumpectomy and has an excellent prognosis. Mammogram screening is related to *in situ* breast cancer incidence rates (Figure 7). Generally, the expected percent of *in situ* breast cancer is approximately 16 percent of all breast cancer diagnosis. Cole, Callaway, and Miller counties were above this percentage. Surprisingly for Callaway and Miller, the percent of women never having had a mammogram was high. In contrast, Cole County had the lowest percent of women never having had a mammogram. The pattern for Cole County makes the most sense although it was not demonstrated with these data. For example, although we do not see it in all counties, Audrain County fits our understanding of the relationship between screening and *in situ* breast cancer: the more screening the higher the percent of *in situ* breast cancer (with it a plateau at approximately 16%) and visa versa. Audrain county had few women never having had a mammogram and they also had few women diagnosed with *in situ* breast cancer.

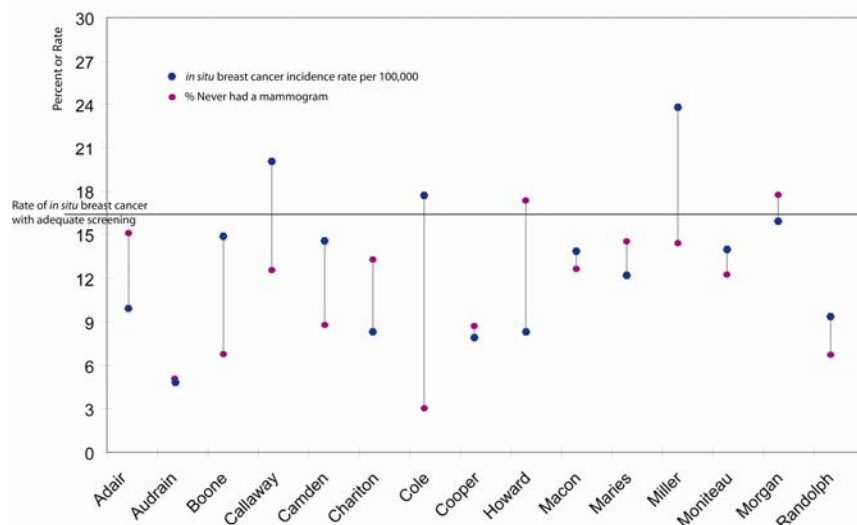


Figure 7. Percent never had a mammogram and *in situ* breast cancer incidence rates per 100,000 by county

Counties: What the Data Show (<http://mcde2.missouri.edu>)

For each county, general descriptive statistics are provided below.

Adair County

- **Population and Change.** Over the period from 2000 to 2008, Adair County's population decreased by 34, going from 24,977 in 2000 to 24,943 in 2008. This was a change of -0.1 percent, compared to 5.7 percent for the state.
- **Age.** In 2007, an estimated 12.1 percent of Adair County residents were 65 and older compared to 13.4 percent statewide. At the same time, the Census Bureau estimated that young people (under 18) made up 18.6 percent of the county's population, compared to 24.2 percent for the state.
- **Racial Diversity.** The 2007 vintage estimates from the Census Bureau indicate that 94.8 percent of the population in the county was White (23,368 persons), while the estimated Black population was 392 (1.6 percent). The same set of estimates indicated there were 528 Asians (2.1 percent) and 76 American Indians (0.3 percent). (These are all "race alone" figures.) Hispanic is not considered to be a race by the Census Bureau/OMB, but rather a separate ethnic category. In 2006, an estimated 434 Hispanic persons (1.8 percent) were living in the county.
- **Place of Residence.** Sub-county estimates for 2007 indicate that 69.6 percent of the county's population lived in incorporated places of 2,500 or more. Those living in smaller places accounted for 4.3 percent of the county's population, while 26.2 percent lived in unincorporated areas.
- **County Income Patterns.** BEA* estimates indicate that Adair County generated over \$560.677 million dollars of total personal income in 2006. Per capita income was \$22,730, compared with \$32,789 for Missouri.
- **Commuting.** In Adair County, 9.5 percent of workers commuted outside their home county to work in 2000. Statewide, 25.2 percent of workers traveled between 30 and 60 minutes to work, while in Adair County 7.7 percent traveled as long. At the same time, 2.8 percent of workers traveled more than 60 minutes to work, compared with 5.4 percent statewide.
- **Educational Attainment.** In 2000, about 28.5 percent of Adair County residents aged 25 years and over (3,791) were college graduates, compared to 21.6 percent statewide. An additional 3,016 had some college education (22.6 percent) compared with 27.0 percent of all Missourians over the age of 25. In 2006, the high school graduation rate in Adair County (86.1 percent) was higher than the statewide rate (85.8 percent), as reported by the Missouri Department of Elementary and Secondary Education.
- **Health Coverage.** While 12.3 percent of Missourians reported having no health coverage, the percent without coverage in Adair County was estimated at 15.5 percent.
- **Breast Cancer Incidence (Invasive and *in situ*).** In 2003-2005 the number of invasive breast cancer cases was 48 (approximately 16/year) and number of *in situ* cases was four (approx. one/year); age-adjusted breast cancer incidence rate of 147.2 per 100,000 (95 percent CI: 108.9-194.6) with the state breast cancer rate of 146.1 (95 percent CI: 143.7-148.5).
- **Breast Cancer Mortality.** In 1996-2006 the number of deaths from breast cancer was 45 (approximately five/year); age-adjusted rate of 17.5 per 100,000.
- **ShowMe Healthy Women Program:** In grant years 2006-2008, 177 women received a clinical breast exam (CBE) and 126 received a mammogram. For combined CBE and

mammogram, 49 women were 35-44 years old; 77 women were 45-54 years old; and 63 women were 55-80 years old.

*BEA means Bureau of Economic Analysis

Audrain County

- **Population and Change.** Over the period from 2000 to 2008, Audrain County's population increased by 196, going from 25,853 to 26,049. This was a change of 0.8 percent, compared to 5.7 percent for the state.
- **Age.** In 2007, an estimated 16.2 percent of Audrain County residents were 65 and older compared to 13.4 percent statewide. At the same time, the Census Bureau estimated that young people (under 18) made up 23.9 percent of the county's population, compared to 24.2 percent for the state.
- **Racial Diversity.** The 2007 vintage estimates from the Census Bureau indicate that 90.0 percent of the population in the county was White (23,301 persons), while the estimated Black population was 2,131 (8.2 percent). The same set of estimates indicated there were 115 Asians (0.4 percent) and 92 American Indians (0.4 percent). (These are all "race alone" figures.) Hispanic is not considered to be a race by the Census Bureau/OMB, but rather a separate ethnic category. In 2006, an estimated 295 Hispanic persons (1.1 percent) were living in the county.
- **Place of Residence.** Sub-county estimates for 2007 indicate that 59.2 percent of the county's population lived in incorporated places of 2,500 or more. Those living in smaller places accounted for 6.4 percent of the county's population, while 34.4 percent lived in unincorporated areas.
- **County Income Patterns.** BEA estimates indicate that Audrain County generated over \$643.205 million dollars of total personal income in 2006. Per capita income was \$24,714, compared with \$32,789 for Missouri.
- **Commuting.** In Audrain County, 20.1 percent of workers commuted outside their home county to work in 2000. Statewide, 25.2 percent of workers traveled between 30 and 60 minutes to work, while in Audrain County 15.0 percent traveled as long. At the same time, 3.8 percent of workers traveled more than 60 minutes to work, compared with 5.4 percent statewide.
- **Educational Attainment.** In 2000, about 12.7 percent of Audrain County residents aged 25 years and over (2,221) were college graduates, compared to 21.6 percent statewide. An additional 3,401 had some college education (19.5 percent) compared with 27.0 percent of all Missourians over the age of 25.
- **Health Coverage.** While 12.3 percent of Missourians reported having no health coverage, the percent without coverage in Audrain County was estimated at 9.3 percent.
- **Breast Cancer Incidence (Invasive and *in situ*).** In 2003-2005 the number of invasive breast cancer cases was 75 (approximately 25/year) and number of *in situ* cases was eight (approx. one/year); age-adjusted breast cancer incidence rate of 161.5 per 100,000 (95 percent CI: 127.7-201.6) with the state breast cancer rate of 146.1 (95 percent CI: 143.7-148.5).
- **Breast Cancer Mortality.** In 1996-2006 the number of deaths from breast cancer was 47 (approximately five/year); age-adjusted rate of 13.1 per 100,000.
- **ShowMe Healthy Women Program:** In grant years 2006-2008, 138 women received a clinical breast exam (CBE) and 111 received a mammogram. For combined CBE and mammogram, 43 women were 35-44 years old; 46 women were 45-54 years old; and 55 women were 55-80 years old.

Boone County

- **Population and Change.** Over the period from 2000 to 2008, Boone County's population increased by 18,911, going from 135,454 to 154,365. This was a change of 14.0 percent, compared to 5.7 percent for the state.
- **Age.** In 2007, an estimated 9.1 percent of Boone County residents were 65 and older compared to 13.4 percent statewide. At the same time, the Census Bureau estimated that young people (under 18) made up 22.4 percent of the county's population, compared to 24.2 percent for the state.
- **Racial Diversity.** The 2007 vintage estimates from the Census Bureau indicate that 85.6 percent of the population in the county was White (130,540 persons), while the estimated Black population was 13,166 (8.6 percent). The same set of estimates indicated there were 5,122 Asians (3.4 percent) and 684 American Indians (0.4). (These are all "race alone" figures.) Hispanic is not considered to be a race by the Census Bureau/OMB, but rather a separate ethnic category. In 2006, an estimated 3,735 Hispanic persons (2.5 percent) were living in the county.
- **Place of Residence.** Sub-county estimates for 2007 indicate that 67.5 percent of the county's population lived in incorporated places of 2,500 or more. Those living in smaller places accounted for 3.1 percent of the county's population, while 29.5 percent lived in unincorporated areas.
- **County Income Patterns.** BEA estimates indicate that Boone County generated over \$4,722.976 million dollars of total personal income in 2006. Per capita income was \$31,524, compared with \$32,789 for Missouri.
- **Commuting.** In Boone County, 9.2 percent of workers commuted outside their home county to work in 2000. Statewide, 25.2 percent of workers traveled between 30 and 60 minutes to work, while in Boone County 13.5 percent traveled as long. At the same time, 2.4 percent of workers traveled more than 60 minutes to work, compared with 5.4 percent statewide.
- **Educational Attainment.** In 2000, about 41.7 percent of Boone County residents aged 25 years and over (32,517) were college graduates, compared to 21.6 percent statewide. An additional 18,799 had some college education (24.1 percent) compared with 27.0 percent of all Missourians over the age of 25.
- **Health Coverage.** While 12.3 percent of Missourians reported having no health coverage, the percent without coverage in Boone County was estimated at 12.2 percent.
- **Breast Cancer Incidence (Invasive and *in situ*).** In 2003-2005 the number of invasive breast cancer cases was 265 (approximately 88/year) and number of *in situ* cases was 43 (approx. 14/year); age-adjusted breast cancer incidence rate of 162.0 per 100,000 (95 percent CI: 144.2-181.3) with the state breast cancer rate of 146.1 (95 percent CI: 143.7-148.5).
- **Breast Cancer Mortality.** In 1996-2006 the number of deaths from breast cancer was 169 (approximately 17/year); age-adjusted rate of 14.6 per 100,000.
- **ShowMe Healthy Women Program:** In grant years 2006-2008, 907 women received a clinical breast exam (CBE) and 452 received a mammogram. For combined CBE and mammogram, 306 women were 35-44 years old; 501 women were 45-54 years old; and 422 women were 55-80 years old.

Callaway County

- Over the period from 2000 to 2008, Callaway County's population increased by 2,698, going from 40,766 to 43,464. This was a change of 6.6 percent, compared to 5.7 percent for the state.
- **Age.** In 2007, an estimated 11.1 percent of Callaway County residents were 65 and older compared to 13.4 percent statewide. At the same time, the Census Bureau estimated that young people (under 18) made up 23.3 percent of the county's population, compared to 24.2 percent for the state.
- **Racial Diversity.** The 2007 vintage estimates from the Census Bureau indicate that 91.8 percent of the population in the county was White (39,888 persons), while the estimated Black population was 2,366 (5.4 percent). The same set of estimates indicated there were 419 Asians (1.0 percent) and 232 American Indians (0.5 percent). (These are all "race alone" figures.) Hispanic is not considered to be a race by the Census Bureau/OMB, but rather a separate ethnic category. In 2006, an estimated 598 Hispanic persons (1.4 percent) were living in the county.
- **County Income Patterns.** BEA estimates indicate that Callaway County generated over \$1,039.460 million dollars of total personal income in 2006. Per capita income was \$24,185, compared with \$32,789 for Missouri.
- **Commuting.** In Callaway County, 48.5 percent of workers commuted outside their home county to work in 2000. Statewide, 25.2 percent of workers traveled between 30 and 60 minutes to work, while in Callaway County 23.3 percent traveled as long. At the same time, 4.4 percent of workers traveled more than 60 minutes to work, compared with 5.4 percent statewide.
- **Educational Attainment.** In 2000, about 16.5 percent of Callaway County residents aged 25 years and over (4,258) were college graduates, compared to 21.6 percent statewide. An additional 6,545 had some college education (25.3 percent) compared with 27.0 percent of all Missourians over the age of 25.
- **Health Coverage.** While 12.3 percent of Missourians reported having no health coverage, the percent without coverage in Callaway County was estimated at 9.3 percent.
- **Breast Cancer Incidence (Invasive and *in situ*).** In 2003-2005 the number of invasive breast cancer cases was 64 (approximately 21/year) and number of *in situ* cases was 25 (approx. eight/year); age-adjusted breast cancer incidence rate of 144.2 per 100,000 (95 percent CI: 115.6-177.6) with the state breast cancer rate of 146.1 (95 percent CI: 143.7-148.5).
- **Breast Cancer Mortality.** In 1996-2006 the number of deaths from breast cancer was 54 (approximately five/year); age-adjusted rate of 13.1 per 100,000.
- **ShowMe Healthy Women Program:** In grant years 2006-2008, 119 women received a clinical breast exam (CBE) and 82 received a mammogram. For combined CBE and mammogram, 19 women were 35-44 years old; 62 women were 45-54 years old; and 65 women were 55-80 years old.

Camden County

- **Population and Change.** Over the period from 2000 to 2008, Camden County's population increased by 3,613, going from 37,051 to 40,664. This was a change of 9.8 percent, compared to 5.7 percent for the state.
- **Age.** In 2007, an estimated 19.7 percent of Camden County residents were 65 and older compared to 13.4 percent statewide. At the same time, the Census Bureau estimated that young people (under 18) made up 19.9 percent of the county's population, compared to 24.2 percent for the state. It also has a high number of residents living below the poverty level at 15.8 percent⁵ but the second lowest percentage of uninsured women aged 18-64 in the area at 11.6 percent¹².
- **Racial Diversity.** The 2007 vintage estimates from the Census Bureau indicate that 97.4 percent of the population in the county was White (39,420 persons), while the estimated Black population was 264 (0.7 percent). The same set of estimates indicated there were 224 Asians (0.6 percent) and 205 American Indians (0.5 percent). (These are all "race alone" figures.) Hispanic is not considered to be a race by the Census Bureau/OMB, but rather a separate ethnic category. In 2006, an estimated 645 Hispanic persons (1.6 percent) were living in the county.
- **Place of Residence.** Sub-county estimates for 2007 indicate that 18.8 percent of the county's population lived in incorporated places of 2,500 or more. Those living in smaller places accounted for 7.3 percent of the county's population, while 73.8 percent lived in unincorporated areas.
- **County Income Patterns.** BEA estimates indicate that Camden County generated over \$1,184.449 million dollars of total personal income in 2006. Per capita income was \$29,604, compared with \$32,789 for Missouri.
- **Commuting.** In Camden County, 24.3 percent of workers commuted outside their home county to work in 2000. Statewide, 25.2 percent of workers traveled between 30 and 60 minutes to work, while in Camden County 20.5 percent traveled as long. At the same time, 5.8 percent of workers traveled more than 60 minutes to work, compared with 5.4 percent statewide.
- **Educational Attainment.** In 2000, about 17.7 percent of Camden County residents aged 25 years and over (4,842) were college graduates, compared to 21.6 percent statewide. An additional 7,598 had some college education (27.8 percent) compared with 27.0 percent of all Missourians over the age of 25.
- **Health Coverage.** While 12.3 percent of Missourians reported having no health coverage, the percent without coverage in Camden County was estimated at 22.6 percent.
- **Breast Cancer Incidence (Invasive and *in situ*).** In 2003-2005 the number of invasive breast cancer cases was 95 (approximately 31/year) and number of *in situ* cases was 16 (approx. six/year); age-adjusted breast cancer incidence rate of 135.6 per 100,000 (95 percent CI: 110.3-165.0) with the state breast cancer rate of 146.1 (95 percent CI: 143.7-148.5).
- **Breast Cancer Mortality.** In 1996-2006 the number of deaths from breast cancer was 57 (approximately six/year); age-adjusted rate of 10.5 per 100,000.
- **ShowMe Healthy Women Program:** In grant years 2006-2008, 230 women received a clinical breast exam (CBE) and 175 received a mammogram. For combined CBE and mammogram, 27 women were 35-44 years old; 123 women were 45-54 years old; and 103 women were 55-80 years old.

Chariton County

- **Population and Change.** Over the period from 2000 to 2008, Chariton County's population decreased by 698, going from 8,438 in 2000 to 7,740 in 2008. This was a change of -8.3 percent, compared to 5.7 percent for the state.
- **Age.** In 2007, an estimated 21.9 percent of Chariton County residents were 65 and older compared to 13.4 percent statewide. At the same time, the Census Bureau estimated that young people (under 18) made up 20.2 percent of the county's population, compared to 24.2 percent for the state. It has a lower percent than area average of families below poverty level (9.1 percent), as well as a higher median income (\$56,755)⁵.
- **Racial Diversity.** The 2007 vintage estimates from the Census Bureau indicate that 95.8 percent of the population in the county was White (7,510 persons), while the estimated Black population was 270 (3.4 percent). The same set of estimates indicated there were 12 Asians (0.2 percent) and 15 American Indians (0.2 percent). (These are all "race alone" figures.) Hispanic is not considered to be a race by the Census Bureau/OMB, but rather a separate ethnic category. In 2006, an estimated 51 Hispanic persons (0.7 percent) were living in the county.
- **Place of Residence.** Sub-county estimates for 2007 indicate that none of the county's population lived in places of 2,500 or more. Those living in smaller places accounted for 44.1 percent of the county's population, while 55.9 percent lived in unincorporated areas.
- **County Income Patterns.** BEA estimates indicate that Chariton County generated over \$208.621 million dollars of total personal income in 2006. Per capita income was \$26,238, compared with \$32,789 for Missouri.
- **Commuting.** In Chariton County, 41.6 percent of workers commuted outside their home county to work in 2000. Statewide, 25.2 percent of workers traveled between 30 and 60 minutes to work, while in Chariton County 21.4 percent traveled as long. At the same time, 6.8 percent of workers traveled more than 60 minutes to work, compared with 5.4 percent statewide.
- **Educational Attainment.** In 2000, about 11.4 percent of Chariton County residents aged 25 years and over (674) were college graduates, compared to 21.6 percent statewide. An additional 1,181 had some college education (20.0 percent) compared with 27.0 percent of all Missourians over the age of 25.
- **Health Coverage.** While 12.3 percent of Missourians reported having no health coverage, the percent without coverage in Chariton County was estimated at 15.7 percent.
- **Breast Cancer Incidence (Invasive and *in situ*).** In 2003-2005 the number of invasive breast cancer cases was 23 (approximately eight/year) and number of *in situ* cases was 3 (approx. one/year); age-adjusted breast cancer incidence rate of 157.1 per 100,000 (95 percent CI: 98.4-237.8) with the state breast cancer rate of 146.1 (95 percent CI: 143.7-148.5).
- **Breast Cancer Mortality.** In 1996-2006 the number of deaths from breast cancer was 26 (approximately two/year); age-adjusted rate of 18.3 per 100,000.
- **ShowMe Healthy Women Program:** In grant years 2006-2008, 44 women received a clinical breast exam (CBE) and 29 received a mammogram. For combined CBE and mammogram, 9 women were 35-44 years old; 23 women were 45-54 years old; and 21 women were 55-80 years old.

Cole County

- **Population and Change.** Over the period from 2000 to 2008, Cole County's population increased by 2,916, going from 71,397 to 74,313. This was a change of 4.1 percent, compared to 5.7 percent for the state.
- **Age.** In 2007, an estimated 11.8 percent of Cole County residents were 65 and older compared to 13.4 percent statewide. At the same time, the Census Bureau estimated that young people (under 18) made up 23.3 percent of the county's population, compared to 24.2 percent for the state.
- **Racial Diversity.** The 2007 vintage estimates from the Census Bureau indicate that 86.7 percent of the population in the county was White (63,863 persons), while the estimated Black population was 7,659 (10.4 percent). The same set of estimates indicated there were 1,009 Asians (1.4 percent) and 276 American Indians (0.4 percent). (These are all "race alone" figures.) Hispanic is not considered to be a race by the Census Bureau/OMB, but rather a separate ethnic category. In 2006, an estimated 1,271 Hispanic persons (1.7 percent) were living in the county.
- **Place of Residence.** Sub-county estimates for 2007 indicate that 55.0 percent of the county's population lived in incorporated places of 2,500 or more. Those living in smaller places accounted for 5.9 percent of the county's population, while 39.1 percent lived in unincorporated areas.
- **County Income Patterns.** BEA estimates indicate that Cole County generated over \$2,582.621 million dollars of total personal income in 2006. Per capita income was \$35,278, compared with \$32,789 for Missouri.
- **Commuting.** In Cole County, 9.5 percent of workers commuted outside their home county to work in 2000. Statewide, 25.2 percent of workers traveled between 30 and 60 minutes to work, while in Cole County 11.4 percent traveled as long. At the same time, 2.7 percent of workers traveled more than 60 minutes to work, compared with 5.4 percent statewide.
- **Educational Attainment.** In 2000, about 27.4 percent of Cole County residents aged 25 years and over (12,980) were college graduates, compared to 21.6 percent statewide. An additional 12,271 had some college education (25.9 percent) compared with 27.0 percent of all Missourians over the age of 25.
- **Health Coverage.** While 12.3 percent of Missourians reported having no health coverage, the percent without coverage in Cole County was estimated at 5.8 percent.
- **Breast Cancer Incidence (Invasive and *in situ*).** In 2003-2005 the number of invasive breast cancer cases was 174 (approximately 58/year) and number of *in situ* cases was 38 (approx. 13/year); age-adjusted breast cancer incidence rate of 183.7 per 100,000 (95 percent CI: 159.6-210.5) with the state breast cancer rate of 146.1 (95 percent CI: 143.7-148.5).
- **Breast Cancer Mortality.** In 1996-2006 the number of deaths from breast cancer was 153 (approximately 15/year); age-adjusted rate of 20.2 per 100,000.
- **ShowMe Healthy Women Program:** In grant years 2006-2008, 244 women received a clinical breast exam (CBE) and 145 received a mammogram. For combined CBE and mammogram, 83 women were 35-44 years old; 131 women were 45-54 years old; and 63 women were 55-80 years old.

Cooper County

- **Population and Change.** Over the period from 2000 to 2008, Cooper County's population increased by 865, going from 16,670 to 17,535. This was a change of 5.2 percent, compared to 5.7 percent for the state.
- **Age.** In 2007, an estimated 14.3 percent of Cooper County residents were 65 and older compared to 13.4 percent statewide. At the same time, the Census Bureau estimated that young people (under 18) made up 21.6 percent of the county's population, compared to 24.2 percent for the state.
- **Racial Diversity.** The 2007 vintage estimates from the Census Bureau indicate that 89.4 percent of the population in the county was White (15,678 persons), while the estimated Black population was 1,542 (8.8 percent). The same set of estimates indicated there were 56 Asians (0.3 percent) and 70 American Indians (0.4 percent). (These are all "race alone" figures.) Hispanic is not considered to be a race by the Census Bureau/OMB, but rather a separate ethnic category. In 2006, an estimated 257 Hispanic persons (1.5 percent) were living in the county.
- **Place of Residence.** Sub-county estimates for 2007 indicate that 49.9 percent of the county's population lived in incorporated places of 2,500 or more. Those living in smaller places accounted for 13.0 percent of the county's population, while 37.1 percent lived in unincorporated areas.
- **County Income Patterns.** BEA estimates indicate that Cooper County generated over \$427.763 million dollars of total personal income in 2006. Per capita income was \$24,543, compared with \$32,789 for Missouri.
- **Commuting.** In Cooper County, 38.0 percent of workers commuted outside their home county to work in 2000. Statewide, 25.2 percent of workers traveled between 30 and 60 minutes to work, while in Cooper County 24.9 percent traveled as long. At the same time, 5.8 percent of workers traveled more than 60 minutes to work, compared with 5.4 percent statewide.
- **Educational Attainment.** In 2000, about 13.7 percent of Cooper County residents aged 25 years and over (1,443) were college graduates, compared to 21.6 percent statewide. An additional 2,407 had some college education (22.8 percent) compared with 27.0 percent of all Missourians over the age of 25.
- **Health Coverage.** While 12.3 percent of Missourians reported having no health coverage, the percent without coverage in Cooper County was estimated at 12.3 percent.
- **Breast Cancer Incidence (Invasive and *in situ*).** In 2003-2005 the number of invasive breast cancer cases was 37 (approximately 12/year) and number of *in situ* cases was 3 (approx. one/year); age-adjusted breast cancer incidence rate of 141.2 per 100,000 (95 percent CI: 99.9-193.8) with the state breast cancer rate of 144.2 (95 percent CI: 115.6-177.6).
- **Breast Cancer Mortality.** In 1996-2006 the number of deaths from breast cancer was 25 (approximately two/year); age-adjusted rate of 11.5 per 100,000.
- **ShowMe Healthy Women Program:** In grant years 2006-2008, 91 women received a clinical breast exam (CBE) and 54 received a mammogram. For combined CBE and mammogram, 14 women were 35-44 years old; 48 women were 45-54 years old; and 53 women were 55-80 years old.

Howard County

- **Population and Change.** Over the period from 2000 to 2008, Howard County's population decreased by 294, going from 10,212 in 2000 to 9,918 in 2008. This was a change of -2.9 percent, compared to 5.7 percent for the state.
- **Age.** In 2007, an estimated 15.9 percent of Howard County residents were 65 and older compared to 13.4 percent statewide. At the same time, the Census Bureau estimated that young people (under 18) made up 21.5 percent of the county's population, compared to 24.2 percent for the state.
- **Racial Diversity.** The 2007 vintage estimates from the Census Bureau indicate that 91.1 percent of the population in the county was White (8,997 persons), while the estimated Black population was 694 (7.0 percent). The same set of estimates indicated there were 24 Asians (0.2 percent) and 45 American Indians (0.5 percent). (These are all "race alone" figures.) Hispanic is not considered to be a race by the Census Bureau/OMB, but rather a separate ethnic category. In 2006, an estimated 114 Hispanic persons (1.2 percent) were living in the county.
- **Place of Residence.** Sub-county estimates for 2007 indicate that 27.2 percent of the county's population lived in incorporated places of 2,500 or more. Those living in smaller places accounted for 27.0 percent of the county's population, while 45.8 percent lived in unincorporated areas.
- **County Income Patterns.** BEA estimates indicate that Howard County generated over \$280.795 million dollars of total personal income in 2006. Per capita income was \$28,320, compared with \$32,789 for Missouri.
- **Commuting.** In Howard County, 51.5 percent of workers commuted outside their home county to work in 2000. Statewide, 25.2 percent of workers traveled between 30 and 60 minutes to work, while in Howard County 32.0 percent traveled as long. At the same time, 6.1 percent of workers traveled more than 60 minutes to work, compared with 5.4 percent statewide.
- **Educational Attainment.** In 2000, about 17.9 percent of Howard County residents aged 25 years and over (1,148) were college graduates, compared to 21.6 percent statewide. An additional 1,310 had some college education (20.4 percent) compared with 27.0 percent of all Missourians over the age of 25.
- **Health Coverage.** While 12.3 percent of Missourians reported having no health coverage, the percent without coverage in Howard County was estimated at 12.2 percent.
- **Breast Cancer Incidence (Invasive and *in situ*).** In 2003-2005 the number of invasive breast cancer cases was 26 (approximately nine/year) and number of *in situ* cases was 1 (approx. <one/year); age-adjusted breast cancer incidence rate of 142.3 per 100,000 (95 percent CI: 91.2-211.7) with the state breast cancer rate of 144.2 (95 percent CI: 115.6-177.6).
- **Breast Cancer Mortality.** In 1996-2006 the number of deaths from breast cancer was 25 (approximately two/year); age-adjusted rate of 18.0 per 100,000.
- **ShowMe Healthy Women Program:** In grant years 2006-2008, 34 women received a clinical breast exam (CBE) and 20 received a mammogram. For combined CBE and mammogram, 8 women were 35-44 years old; 15 women were 45-54 years old; and 16 women were 55-80 years old.

Macon County

- **Population and Change.** Over the period from 2000 to 2008, Macon County's population decreased by 141, going from 15,762 in 2000 to 15,621 in 2008. This was a change of -0.9 percent, compared to 5.7 percent for the state.
- **Age.** In 2007, an estimated 19.0 percent of Macon County residents were 65 and older compared to 13.4 percent statewide. At the same time, the Census Bureau estimated that young people (under 18) made up 23.0 percent of the county's population, compared to 24.2 percent for the state.
- **Racial Diversity.** The 2007 vintage estimates from the Census Bureau indicate that 95.8 percent of the population in the county was White (14,924 persons), while the estimated Black population was 400 (2.6 percent). The same set of estimates indicated there were 29 Asians (0.2 percent) and 68 American Indians (0.4 percent). (These are all "race alone" figures.) Hispanic is not considered to be a race by the Census Bureau/OMB, but rather a separate ethnic category. In 2006, an estimated 163 Hispanic persons (1.0 percent) were living in the county.
- **Place of Residence.** Sub-county estimates for 2007 indicate that 35.1 percent of the county's population lived in incorporated places of 2,500 or more. Those living in smaller places accounted for 21.7 percent of the county's population, while 43.3 percent lived in unincorporated areas.
- **Place of Residence.** Sub-county estimates for 2007 indicate that 35.1 percent of the county's population lived in incorporated places of 2,500 or more. Those living in smaller places accounted for 21.7 percent of the county's population, while 43.3 percent lived in unincorporated areas.
- **Commuting.** In Macon County, 28.0 percent of workers commuted outside their home county to work in 2000. Statewide, 25.2 percent of workers traveled between 30 and 60 minutes to work, while in Macon County 17.1 percent traveled as long. At the same time, 6.4 percent of workers traveled more than 60 minutes to work, compared with 5.4 percent statewide.
- **Educational Attainment.** In 2000, about 13.0 percent of Macon County residents aged 25 years and over (1,397) were college graduates, compared to 21.6 percent statewide. An additional 2,137 had some college education (19.9 percent) compared with 27.0 percent of all Missourians over the age of 25.
- **Health Coverage.** While 12.3 percent of Missourians reported having no health coverage, the percent without coverage in Macon County was estimated at 12.8 percent.
- **Breast Cancer Incidence (Invasive and *in situ*).** In 2003-2005 the number of invasive breast cancer cases was 43 (approximately 14/year) and number of *in situ* cases was 8 (approx. three/year); age-adjusted breast cancer incidence rate of 152.8 per 100,000 (95 percent CI: 111.0-205.2) with the state breast cancer rate of 144.2 (95 percent CI: 115.6-177.6).
- **Breast Cancer Mortality.** In 1996-2006 the number of deaths from breast cancer was 47 (approximately five/year); age-adjusted rate of 19.1 per 100,000.
- **ShowMe Healthy Women Program:** In grant years 2006-2008, 68 women received a clinical breast exam (CBE) and 55 received a mammogram. For combined CBE and mammogram, 16 women were 35-44 years old; 29 women were 45-54 years old; and 32 women were 55-80 years old.

Maries County

- **Population and Change.** Over the period from 2000 to 2008, Maries County's population increased by 143, going from 8,903 to 9,046. This was a change of 1.6 percent, compared to 5.7 percent for the state.
- **Age.** In 2007, an estimated 16.2 percent of Maries County residents were 65 and older compared to 13.4 percent statewide. At the same time, the Census Bureau estimated that young people (under 18) made up 22.8 percent of the county's population, compared to 24.2 percent for the state.
- **Racial Diversity.** The 2007 vintage estimates from the Census Bureau indicate that 97.3 percent of the population in the county was White (8,865 persons), while the estimated Black population was 65 (0.7 percent). The same set of estimates indicated there were 12 Asians (0.1 percent) and 55 American Indians (0.6 percent). (These are all "race alone" figures.) Hispanic is not considered to be a race by the Census Bureau/OMB, but rather a separate ethnic category. In 2006, an estimated 150 Hispanic persons (1.6 percent) were living in the county.
- **Place of Residence.** Sub-county estimates for 2007 indicate that none of the county's population lived in places of 2,500 or more. Those living in smaller places accounted for 20.6 percent of the county's population, while 79.4 percent lived in unincorporated areas.
- **County Income Patterns.** BEA estimates indicate that Maries County generated over \$218.096 million dollars of total personal income in 2006. Per capita income was \$24,171, compared with \$32,789 for Missouri.
- **Commuting.** In Maries County, 65.5 percent of workers commuted outside their home county to work in 2000. Statewide, 25.2 percent of workers traveled between 30 and 60 minutes to work, while in Maries County 34.5 percent traveled as long. At the same time, 14.0 percent of workers traveled more than 60 minutes to work, compared with 5.4 percent statewide.
- **Educational Attainment.** In 2000, about 11.0 percent of Maries County residents aged 25 years and over (656) were college graduates, compared to 21.6 percent statewide. An additional 1,274 had some college education (21.3 percent) compared with 27.0 percent of all Missourians over the age of 25.
- **Health Coverage.** While 12.3 percent of Missourians reported having no health coverage, the percent without coverage in Maries County was estimated at 10.7 percent.
- **Breast Cancer Incidence (Invasive and *in situ*).** In 2003-2005 the number of invasive breast cancer cases was six (approximately two/year) and number of *in situ* cases was seven (approx. two/year); age-adjusted breast cancer incidence rate of 87.8 per 100,000 (95 percent CI: 58.4-126.9)* with the state breast cancer rate of 144.2 (95 percent CI: 115.6-177.6).
- **Breast Cancer Mortality.** In 1996-2006 the number of deaths from breast cancer was 27 (approximately three/year); age-adjusted rate of 24.4 per 100,000.
- **ShowMe Healthy Women Program:** In grant years 2006-2008, 23 women received a clinical breast exam (CBE) and 22 received a mammogram. For combined CBE and mammogram, zero women were 35-44 years old; seven women were 45-54 years old; and 19 women were 55-80 years old.

*Too few cases so calculated rate based on 2000-2005

Miller County

- **Population and Change.** Over the period from 2000 to 2008, Miller County's population increased by 1,385, going from 23,564 to 24,949. This was a change of 5.9 percent, compared to 5.7 percent for the state.
- **Age.** In 2007, an estimated 15.5 percent of Miller County residents were 65 and older compared to 13.4 percent statewide. At the same time, the Census Bureau estimated that young people (under 18) made up 24.3 percent of the county's population, compared to 24.2 percent for the state.
- **Racial Diversity.** The 2007 vintage estimates from the Census Bureau indicate that 97.7 percent of the population in the county was White (24,320 persons), while the estimated Black population was 170 (0.7 percent). The same set of estimates indicated there were 69 Asians (0.3 percent) and 118 American Indians (0.5 percent). (These are all "race alone" figures.) Hispanic is not considered to be a race by the Census Bureau/OMB, but rather a separate ethnic category. In 2006, an estimated 316 Hispanic persons (1.3 percent) were living in the county.
- **Place of Residence.** Sub-county estimates for 2007 indicate that 19.9 percent of the county's population lived in incorporated places of 2,500 or more. Those living in smaller places accounted for 15.2 percent of the county's population, while 64.8 percent lived in unincorporated areas.
- **County Income Patterns.** BEA estimates indicate that Miller County generated over \$565.444 million dollars of total personal income in 2006. Per capita income was \$22,786, compared with \$32,789 for Missouri.
- **Commuting.** In Miller County, 42.6 percent of workers commuted outside their home county to work in 2000. Statewide, 25.2 percent of workers traveled between 30 and 60 minutes to work, while in Miller County 30.3 percent traveled as long. At the same time, 6.0 percent of workers traveled more than 60 minutes to work, compared with 5.4 percent statewide.
- **Educational Attainment.** In 2000, about 11.4 percent of Miller County residents aged 25 years and over (1,748) were college graduates, compared to 21.6 percent statewide. An additional 3,426 had some college education (22.3 percent) compared with 27.0 percent of all Missourians over the age of 25.
- **Health Coverage.** While 12.3 percent of Missourians reported having no health coverage, the percent without coverage in Miller County was estimated at 22.6 percent.
- **Breast Cancer Incidence (Invasive and *in situ*).** In 2003-2005 the number of invasive breast cancer cases was 40 (approximately 13/year) and number of *in situ* cases was 11 (approx. four/year); age-adjusted breast cancer incidence rate of 116.9 per 100,000 (95 percent CI: 86.5-154.6) with the state breast cancer rate of 144.2 (95 percent CI: 115.6-177.6).
- **Breast Cancer Mortality.** In 1996-2006 the number of deaths from breast cancer was 40 (approximately four/year); age-adjusted rate of 13.0 per 100,000.
- **ShowMe Healthy Women Program:** In grant years 2006-2008, 171 women received a clinical breast exam (CBE) and 103 received a mammogram. For combined CBE and mammogram, 66 women were 35-44 years old; 98 women were 45-54 years old; and 62 women were 55-80 years old.

Moniteau County

- **Population and Change.** Over the period from 2000 to 2008, Moniteau County's population increased by 294, going from 14,827 to 15,121. This was a change of 2.0 percent, compared to 5.7 percent for the state.
- **Age.** In 2007, an estimated 13.2 percent of Moniteau County residents were 65 and older compared to 13.4 percent statewide. At the same time, the Census Bureau estimated that young people (under 18) made up 24.4 percent of the county's population, compared to 24.2 percent for the state.
- **Racial Diversity.** The 2007 vintage estimates from the Census Bureau indicate that 94.0 percent of the population in the county was White (14,258 persons), while the estimated Black population was 613 (4.0 percent). The same set of estimates indicated there were 67 Asians (0.4 percent) and 64 American Indians (0.4 percent). (These are all "race alone" figures.) Hispanic is not considered to be a race by the Census Bureau/OMB, but rather a separate ethnic category. In 2006, an estimated 537 Hispanic persons (3.5 percent) were living in the county.
- **Place of Residence.** Sub-county estimates for 2007 indicate that 49.2 percent of the county's population lived in incorporated places of 2,500 or more. Those living in smaller places accounted for 5.3 percent of the county's population, while 45.4 percent lived in unincorporated areas.
- **County Income Patterns.** BEA estimates indicate that Moniteau County generated over \$379.083 million dollars of total personal income in 2006. Per capita income was \$25,115, compared with \$32,789 for Missouri.
- **Commuting.** In Moniteau County, 46.5 percent of workers commuted outside their home county to work in 2000. Statewide, 25.2 percent of workers traveled between 30 and 60 minutes to work, while in Moniteau County 30.7 percent traveled as long. At the same time, 5.2 percent of workers traveled more than 60 minutes to work, compared with 5.4 percent statewide.
- **Educational Attainment.** In 2000, about 13.0 percent of Moniteau County residents aged 25 years and over (1,270) were college graduates, compared to 21.6 percent statewide. An additional 2,012 had some college education (20.6 percent) compared with 27.0 percent of all Missourians over the age of 25.
- **Health Coverage.** While 12.3 percent of Missourians reported having no health coverage, the percent without coverage in Moniteau County was estimated at 5.8 percent.
- **Breast Cancer Incidence (Invasive and *in situ*).** In 2003-2005 the number of invasive breast cancer cases was 23 (approximately eight/year) and number of *in situ* cases was two (approx. <one/year); age-adjusted breast cancer incidence rate of 98.2 per 100,000 (95 percent CI: 62.3-147.4) with the state breast cancer rate of 144.2 (95 percent CI: 115.6-177.6).
- **Breast Cancer Mortality.** In 1996-2006 the number of deaths from breast cancer was 17 (approximately two/year); age-adjusted rate of 9.4 per 100,000.
- **ShowMe Healthy Women Program:** In grant years 2006-2008, 43 women received a clinical breast exam (CBE) and 26 received a mammogram. For combined CBE and mammogram, 8 women were 35-44 years old; 21 women were 45-54 years old; and 22 women were 55-80 years old.

Morgan County

- **Population and Change.** Over the period from 2000 to 2008, Morgan County's population increased by 1,552, going from 19,309 to 20,861. This was a change of 8.0 percent, compared to 5.7 percent for the state.
- **Age.** In 2007, an estimated 20.5 percent of Morgan County residents were 65 and older compared to 13.4 percent statewide. At the same time, the Census Bureau estimated that young people (under 18) made up 23.2 percent of the county's population, compared to 24.2 percent for the state.
- **Racial Diversity.** The 2007 vintage estimates from the Census Bureau indicate that 97.3 percent of the population in the county was White (20,255 persons), while the estimated Black population was 156 (0.7 percent). The same set of estimates indicated there were 50 Asians (0.2 percent) and 136 American Indians (0.7 percent). (These are all "race alone" figures.) Hispanic is not considered to be a race by the Census Bureau/OMB, but rather a separate ethnic category. In 2006, an estimated 215 Hispanic persons (1.0 percent) were living in the county.
- **Place of Residence.** Sub-county estimates for 2007 indicate that 13.0 percent of the county's population lived in incorporated places of 2,500 or more. Those living in smaller places accounted for 12.0 percent of the county's population, while 74.9 percent lived in unincorporated areas.
- **County Income Patterns.** BEA estimates indicate that Morgan County generated over \$520.539 million dollars of total personal income in 2006. Per capita income was \$25,247, compared with \$32,789 for Missouri.
- **Commuting.** In Morgan County, 38.9 percent of workers commuted outside their home county to work in 2000. Statewide, 25.2 percent of workers traveled between 30 and 60 minutes to work, while in Morgan County 23.6 percent traveled as long. At the same time, 8.3 percent of workers traveled more than 60 minutes to work, compared with 5.4 percent statewide.
- **Educational Attainment.** In 2000, about 10.7 percent of Morgan County residents aged 25 years and over (1,445) were college graduates, compared to 21.6 percent statewide. An additional 3,117 had some college education (23.1 percent) compared with 27.0 percent of all Missourians over the age of 25.
- **Health Coverage.** While 12.3 percent of Missourians reported having no health coverage, the percent without coverage in Morgan County was estimated at 13.8 percent.
- **Breast Cancer Incidence (Invasive and *in situ*).** In 2003-2005 the number of invasive breast cancer cases was 46 (approximately 15/year) and number of *in situ* cases was 12 (approx. four/year); age-adjusted breast cancer incidence rate of 147.1 per 100,000 (95 percent CI: 109.5-193.4) with the state breast cancer rate of 144.2 (95 percent CI: 115.6-177.6).
- **Breast Cancer Mortality.** In 1996-2006 the number of deaths from breast cancer was 40 (approximately four/year); age-adjusted rate of 14.6 per 100,000.
- **ShowMe Healthy Women Program:** In grant years 2006-2008, 152 women received a clinical breast exam (CBE) and 99 received a mammogram. For combined CBE and mammogram, 33 women were 35-44 years old; 91 women were 45-54 years old; and 71 women were 55-80 years old.

Randolph County

- **Population and Change.** Over the period from 2000 to 2008, Randolph County's population increased by 1,060, going from 24,663 to 25,723. This was a change of 4.3 percent, compared to 5.7 percent for the state.
- **Age.** In 2007, an estimated 14.2 percent of Randolph County residents were 65 and older compared to 13.4 percent statewide. At the same time, the Census Bureau estimated that young people (under 18) made up 23.6 percent of the county's population, compared to 24.2 percent for the state.
- **Racial Diversity.** The 2007 vintage estimates from the Census Bureau indicate that 90.7 percent of the population in the county was White (23,198 persons), while the estimated Black population was 1,728 (6.8 percent). The same set of estimates indicated there were 190 Asians (0.7 percent) and 138 American Indians (0.5 percent). (These are all "race alone" figures.) Hispanic is not considered to be a race by the Census Bureau/OMB, but rather a separate ethnic category. In 2006, an estimated 374 Hispanic persons (1.5 percent) were living in the county.
- **Place of Residence.** Sub-county estimates for 2007 indicate that 55.1 percent of the county's population lived in incorporated places of 2,500 or more. Those living in smaller places accounted for 13.4 percent of the county's population, while 31.5 percent lived in unincorporated areas.
- **County Income Patterns.** BEA estimates indicate that Randolph County generated over \$632.449 million dollars of total personal income in 2006. Per capita income was \$24,767, compared with \$32,789 for Missouri.
- **Commuting.** In Randolph County, 22.7 percent of workers commuted outside their home county to work in 2000. Statewide, 25.2 percent of workers traveled between 30 and 60 minutes to work, while in Randolph County 18.0 percent traveled as long. At the same time, 5.8 percent of workers traveled more than 60 minutes to work, compared with 5.4 percent statewide.
- **Educational Attainment.** In 2000, about 11.7 percent of Randolph County residents aged 25 years and over (1,928) were college graduates, compared to 21.6 percent statewide. An additional 4,452 had some college education (27.1 percent) compared with 27.0 percent of all Missourians over the age of 25.
- **Health Coverage.** While 12.3 percent of Missourians reported having no health coverage, the percent without coverage in Randolph County was estimated at 12.8 percent.
- **Breast Cancer Incidence (Invasive and *in situ*).** In 2003-2005 the number of invasive breast cancer cases was 49 (approximately 16/year) and number of *in situ* cases was four (approx. one/year); age-adjusted breast cancer incidence rate of 122.6 per 100,000 (95 percent CI: 90.7-162.1) with the state breast cancer rate of 144.2 (95 percent CI: 115.6-177.6).
- **Breast Cancer Mortality.** In 1996-2006 the number of deaths from breast cancer was 54 (approximately five/year); age-adjusted rate of 13.1 per 100,000.
- **ShowMe Healthy Women Program:** In grant years 2006-2008, 53 women received a clinical breast exam (CBE) and 42 received a mammogram. For combined CBE and mammogram, 15 women were 35-44 years old; 27 women were 45-54 years old; and 36 women were 55-80 years old.

Osage County (in St. Louis Affiliate area but likely to join our Affiliate in 2009)

- **Population and Change.** Over the period from 2000 to 2008, Osage County's population increased by 403, going from 13,062 to 13,465. This was a change of 3.1 percent, compared to 5.7 percent for the state.
- **Age.** In 2007, an estimated 14.9 percent of Osage County residents were 65 and older compared to 13.4 percent statewide. At the same time, the Census Bureau estimated that young people (under 18) made up 24.5 percent of the county's population, compared to 24.2 percent for the state.
- **Racial Diversity.** The 2007 vintage estimates from the Census Bureau indicate that 98.5 percent of the population in the county was White (13,194 persons), while the estimated Black population was 40 (0.3 percent). The same set of estimates indicated there were 28 Asians (0.2 percent) and 32 American Indians (0.2 percent). (These are all "race alone" figures.) Hispanic is not considered to be a race by the Census Bureau/OMB, but rather a separate ethnic category. In 2006, an estimated 93 Hispanic persons (0.7 percent) were living in the county.
- **Place of Residence.** Sub-county estimates for 2007 indicate that none of the county's population lived in places of 2,500 or more. Those living in smaller places accounted for 24.1 percent of the county's population, while 75.9 percent lived in unincorporated areas.
- **County Income Patterns.** BEA estimates indicate that Osage County generated over \$388.462 million dollars of total personal income in 2006. Per capita income was \$28,830, compared with \$32,789 for Missouri.
- **Commuting.** In Osage County, 58.7 percent of workers commuted outside their home county to work in 2000. Statewide, 25.2 percent of workers traveled between 30 and 60 minutes to work, while in Osage County 40.6 percent traveled as long. At the same time, 6.0 percent of workers traveled more than 60 minutes to work, compared with 5.4 percent statewide.
- **Educational Attainment.** In 2000, about 10.4 percent of Osage County residents aged 25 years and over (868) were college graduates, compared to 21.6 percent statewide. An additional 1,736 had some college education (20.7 percent) compared with 27.0 percent of all Missourians over the age of 25. In 2006, the high school graduation rate in Osage County (90.9 percent) was higher than the statewide rate (85.8 percent), as reported by the Missouri Department of Elementary and Secondary Education.
- **Health Coverage.** While 12.3 percent of Missourians reported having no health coverage, the percent without coverage in Osage County was estimated at 10.7 percent.
- **Breast Cancer Incidence (Invasive and *in situ*).** In 2003-2005 the number of invasive breast cancer cases was 25 (approximately eight/year) and number of *in situ* cases was four (approx. one/year); age-adjusted breast cancer incidence rate of 128.0 per 100,000 (95 percent CI: 84.3-186.2) with the state breast cancer rate of 144.2 (95 percent CI: 115.6-177.6).
- **Breast Cancer Mortality.** In 1996-2006 the number of deaths from breast cancer was 18 (approximately two/year); age-adjusted rate not reported due to few cases.

Breast Cancer Findings & Target Areas

Members of the Community Profile Report team reviewed the data (Table 1). Data were compared by county and to Missouri state data. Preliminary secondary data analysis based on breast cancer incidence and mortality and demographic statistics revealed four targeted areas for the Mid-Missouri Affiliate area: Camden, Chariton, Cole, and Morgan. Of the 15 counties, Morgan, Chariton and Maries Counties had the most “issues” (Table 1). Cole County has the highest incidence of cancer and the high mortality rate. It also has the highest percent African-American/Blacks of our counties. Morgan lacked health coverage and limited mammograms. Although Camden County has many resources, it has a high percentage of older women; it is known in the literature that postmenopausal women are less likely to get a mammogram, even though breast cancer is an age-related disease. Of Mid-Missouri’s 15 counties, Camden has the third highest number of breast cancer cases with Boone and Cole counties in first and second place. Although Maries County also scored high for several concerns, the number of breast cancer cases was very low at approximately four cases per year. Consequently, we did not add this county to the list for a targeted, in depth needs assessment.

Table 1. Characteristics of our mid-Missouri Affiliate Counties for Community Profile -- Targeting our efforts																	
	Missouri	Adair	Audrain	Boone	Callaway	Camden	Chariton	Cole	Cooper	Howard	Macon	Maries	Miller	Moniteau	Morgan	Randolph	Total by characteristic
Population (OSEDA 2007)	5,878,415	24,642	25,892	152,435	43,428	40,487	7,843	73,698	17,543	9,879	15,576	9,115	24,898	15,167	20,820	25,590	
% White	85.1	94.8	90.0	85.6	91.8	97.4	95.8	86.7	89.4	91.1	95.8	97.3	97.7	94.0	97.3	90.7	
% Black	11.5	1.6	8.2	8.6	5.4	0.7	3.4	10.4	8.8	7.0	2.6	0.7	0.7	4.0	0.7	6.8	4
% Hispanic	3.0	1.8	1.1	2.5	1.4	1.6	0.7	1.7	1.5	1.2	1.0	1.6	1.3	3.5	1.0	1.5	1
Female Population (HHS Office on Women's Health - 2005)																	
Women age 20 and up - White	1,897,194	8,986	9,485	47,279	14,370	15,467	3,074	23,876	5,609	3,413	5,893	3,263	9,252	5,053	7,768	8,455	
Women age 20 and up - Black	240,338	127	1,079	4,277	532	63	138	1,785	265	261	133	20	19	37	40	334	
Women age 20 and up - Hispanic	44,959	134	89	945	129	169	15	369	64	31	58	48	95	108	67	133	
Women with breast cancer - all stages (MICA 1997-2006)																	
Number	43063	153	222	836	256	330	83	589	123	72	149	53	152	92	161	154	
Incidence Rate (2003-2006)	149.9	147	162	162	144	136	157	184	141	142	153	88	117	98	147	122	1
% In situ	15.5	10.7	5.5	14.6	19.2	14.7	8.6	15.8	8.3	7	13.4	11.3	23.2	14.3	16.4	9.2	5
Breast Cancer Mortality (MO DHSS 1996-2006)																	
Number	10011	45	47	169	54	57	26	153	25	25	47	27	40	17	40	42	
Rate	15.2	17.5	13.1	14.6	13.1	10.5	18.3	20.2	11.5	18	19.1	24.4	13	9.4	14.6	13.6	2
BRFSS (2007)																	
No Health Coverage - %	14.7	17.6	14.9	14	11.8	18.9	14.8	9.7	15.1	14.3	15.7	15.6	25.2	20.3	25.7	18	2
Never had a Mammogram - %	8.7	15.4	5.6	6.8	12.1	9.1	13.4	4.1	9	16.7	12.3	14.3	14.2	11.9	17.8	7.4	2
No mammogram or CBE in the past 12 months - %	27.6	31.5	21.1	18.1	33.6	31.8	26.3	23.3	32	33.4	30.4	40.2	44.2	36.7	39.5	31.3	3
Did not get medical care - %	7.5	10.5	8.4	6.7	11.9	9.8	4.4	5.6	8.3	6	8	7.9	11	5.9	9.3	13.1	2
Small Area Health Insurance Estimates US Census (2005)																	
Percent uninsured	14	19.9	13.4	16.2	12.9	20.3	19.8	12.9	13.4	16.6	16.7	18.7	16.2	16.5	22.7	12.1	5
OSEDA - Social & Economic Indicators																	
% of households below poverty level (2005)	13.6	24.4	15.8	18.3	11.1	13	14.6	9.6	12.7	14.1	15.3	13.8	15.4	11.5	17.7	16.7	3
% of population age 55 and older (2007)	24.6	21.2	27.3	18.1	21.8	34.4	34.7	23.2	24.5	27	31.3	28	26.2	23.3	33.2	24.9	4
% of population age 65 and older (2007)	13.4	12.1	16.2	9.1	11.1	19.7	21.9	11.8	14.3	15.9	19	16.2	15.5	13.2	20.5	14.2	3
Health Professional Shortage - Primary Care (HHS 2007)		For Low Income	For Low Income	For Low Income	For Low Income	For Low Income	Whole County		For Low Income	For Low Income	For Low Income	Whole County	For Low Income	For Low Income	For Low Income	For Low Income	2
Mammography Center in County?	N/A	Yes	Yes	Yes	Yes	No	No	Yes	No	No	No	No	Yes	No	No	Yes	7
Show Me Healthy Women (SMHW) Program																	
SMHW provider in County?	N/A	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	2
number of mammograms, 2006-2008		126	111	452	82	175	29	145	54	20	55	22	103	26	99	42	
Total difference by county		2	2	2	2	4	6	3	3	3	2	5	2	1	8	3	
Pink bold means statistically significantly different																	

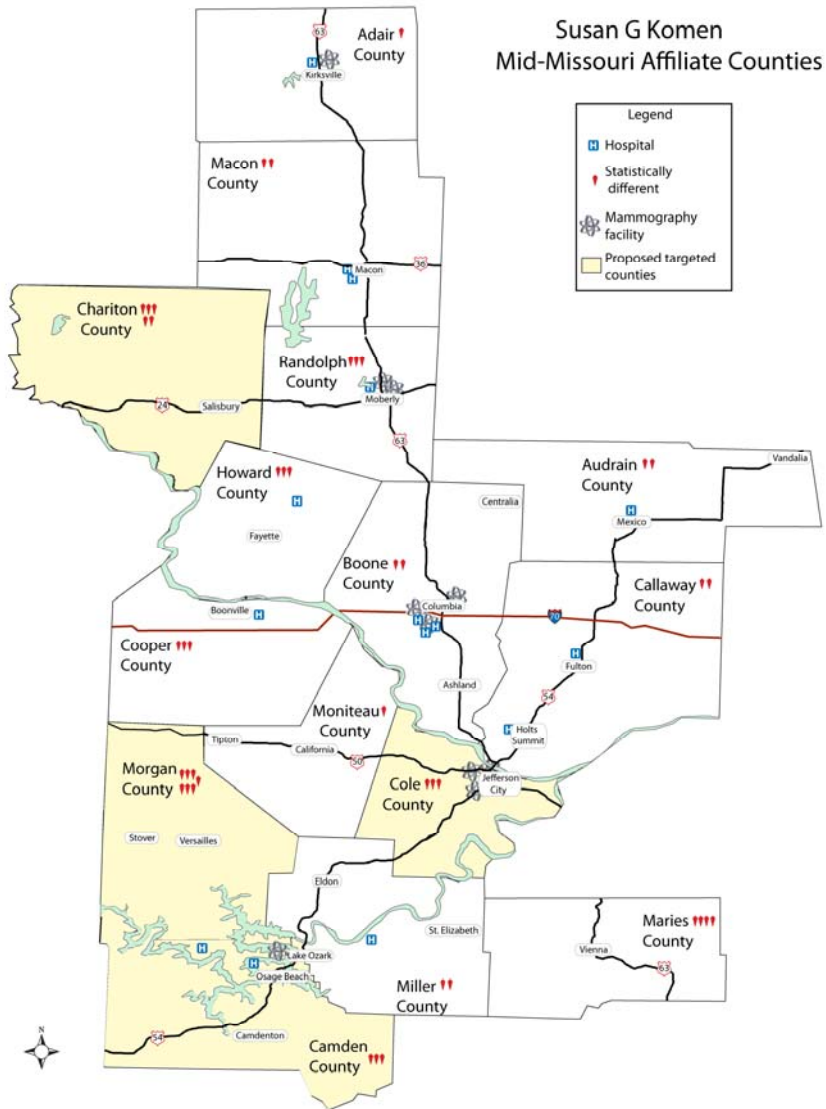


Figure 8. Mid-Missouri Komen Affiliate counties with targeted counties in yellow

Programs and Services

Data Source and Methodology

The Mid-Missouri Affiliate serves a predominately rural community. The number of health care facilities including hospitals and clinic, cancer treatment facilities, radiology facilities, federally qualified health centers is sparse. In addition, support groups and complementary and alternative medicine options are also limited. Almost none of the Mid-Missouri Affiliate counties have adequate coverage by health professionals. Boone, Cole, Randolph, and Camden counties are exception to the rather limited local services available county residents. Below are maps that indicate the location of important places in our targeted counties.

Programs and Services Overview

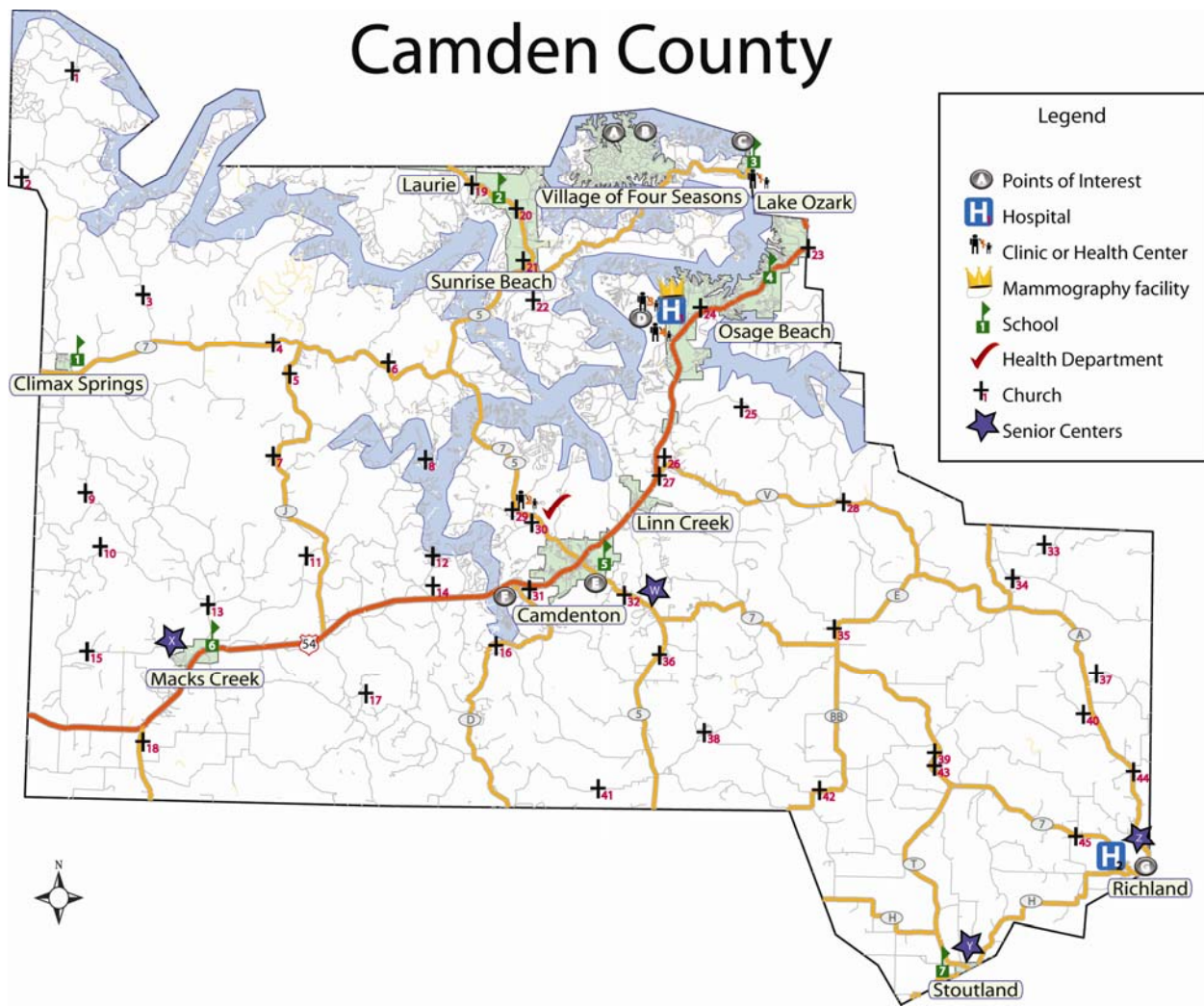


Figure 9. Locations of key places within Camden County

Camden County Extended Legend

Points of Interest

A	Kiwanis Club of Ozark Coast	B	Missouri Home Care
C	Lake Area Chamber of Commerce	D	Women's Health Consultants
E	Camden County Nursing Service	F	Juvenile Justice Center
G	Missouri Ozarks Community Action		

Senior Centers

W	Camdenton Senior Center	X	Macks Creek Senior Center
Y	Stoutland Senior Center	Z	Warren Senior Center

Hospitals

1	Lake of the Ozark General Hospital **with mammography center**	2	Central Ozarks Medical Center
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Clinics or Health centers

1	Lake Ozark Clinic	2	Camdenton Community Health Center
3	Bay Point Maternity & Women's Health	4	Lake Convenience Clinic

Schools

1	Climax Springs Elementary	2	Hurricane Deck Elementary
3	Leland O. Mills Elementary	4	Osage Beach Elementary
5	Hawthorn Elementary	6	Macks Creek Elementary
7	Stoutland Elementary		

Churches

1	Lick Creek	2	Cable ridge Church of Christ
3	Pearson Branch	4	Mission Point
5	Ozark Bethel Chapel	6	Mount Taber
7	Lower Prairie Hollow	8	Montgomery
9	Green Ridge	10	Harmony
11	Parrack Grove	12	New Tribes Mission
13	Mission Ridge	14	Big Niangual
15	Hickory Grove	16	Webster Grove
17	Pleasant Grove	18	Assembly of God
19	Sunrise	20	Kent Memorial
21	Lakeland	22	Rockdale
23	Riverview	24	Harpers
25	Zion(Historical)	26	Church of Christ
27	Linn Creek	28	Church of Christ (2)
29	New Home	30	Church of Jesus Christ of Latter Day Saints
31	Nazarene	32	Southside
33	Twelve Corners (Historical)	34	Glover Chapel
35	Buffalo Prairie	36	Myetta
37	Elm Grove	38	Union
39	Sunnyside (Historical)	40	Mountview
41	Mount Horeb	42	High Point
43	Campground	44	Montrose
45	Beulah		

Chariton County

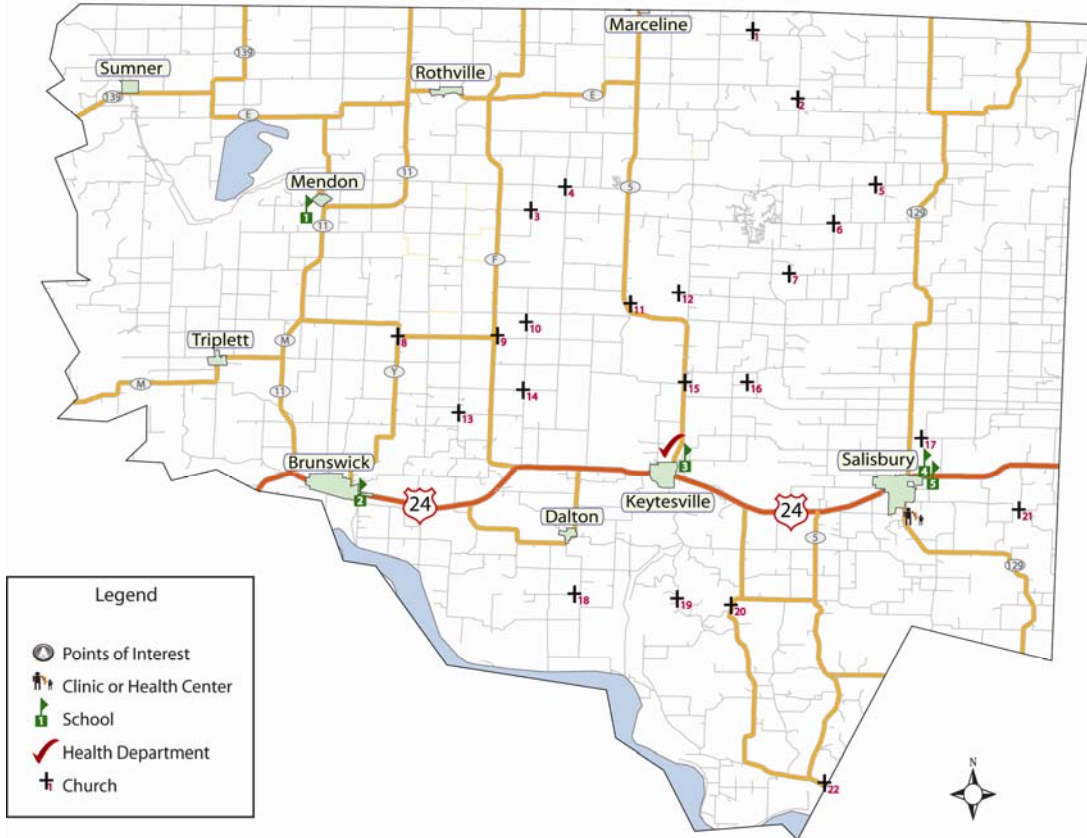


Figure 10. Locations of key places within Chariton County

Chariton County Extended Legend

Clinic or Health Centers

- 1 Family Health Center at Salisbury

Schools

- | | |
|---------------------------|------------------------|
| 1 Northwestern Elementary | 2 Brunswick Elementary |
| 3 Keytesville Elementary | 4 Salisbury Elementary |
| 5 Salisbury High | |

Churches

- | | |
|-------------------|------------------|
| 1 Peden Chapel | 2 Plainview |
| 3 Siloam | 4 St. Joseph |
| 5 Mount Zion | 6 Kelly |
| 7 Beulah | 8 Zion |
| 9 St. Raphael | 10 Powell |
| 11 Mount Pleasant | 12 Corinth |
| 13 Prairie | 14 Bethel |
| 15 Bethel (2) | 16 Bennett |
| 17 Prairie Valley | 18 Pleasant Wood |
| 19 Immanuel | 20 Elm Ridge |
| 21 Asbury | 22 Marian Hill |

Cole County

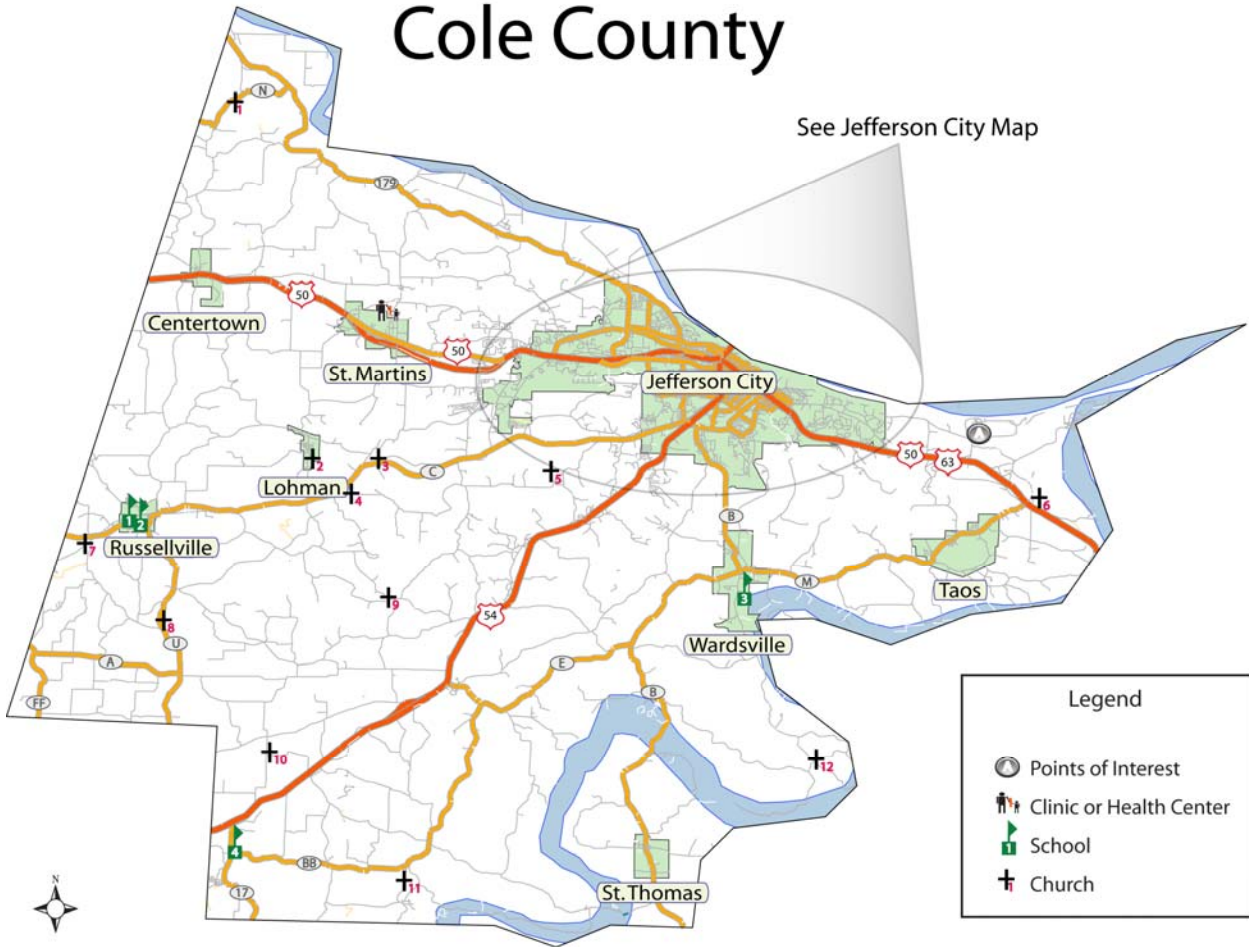


Figure 11. Locations of key places within Cole County

Clinics or Health centers

- 1 Pathways Community Behavioral Health

Points of Interests

- A Jefferson City Correctional Center

Schools

- | | |
|-------------------------|---------------------------|
| 1 Russellville High | 2 Cole Co. R-I Elementary |
| 3 Blair Oaks Elementary | 4 Eugene Elementary |

Churches

- | | |
|-----------------------------|-----------------------------|
| 1 New Hope | 2 Saint Pauls |
| 3 Old Catholic (Historical) | 4 Saint Johns |
| 5 Zion | 6 Saint Johns (2) |
| 7 Cole Spring | 8 Mount Olive |
| 9 Pleasant Hill | 10 Mount Union (Historical) |
| 11 Spring Valley | 12 Saint Margaret |

Jefferson City

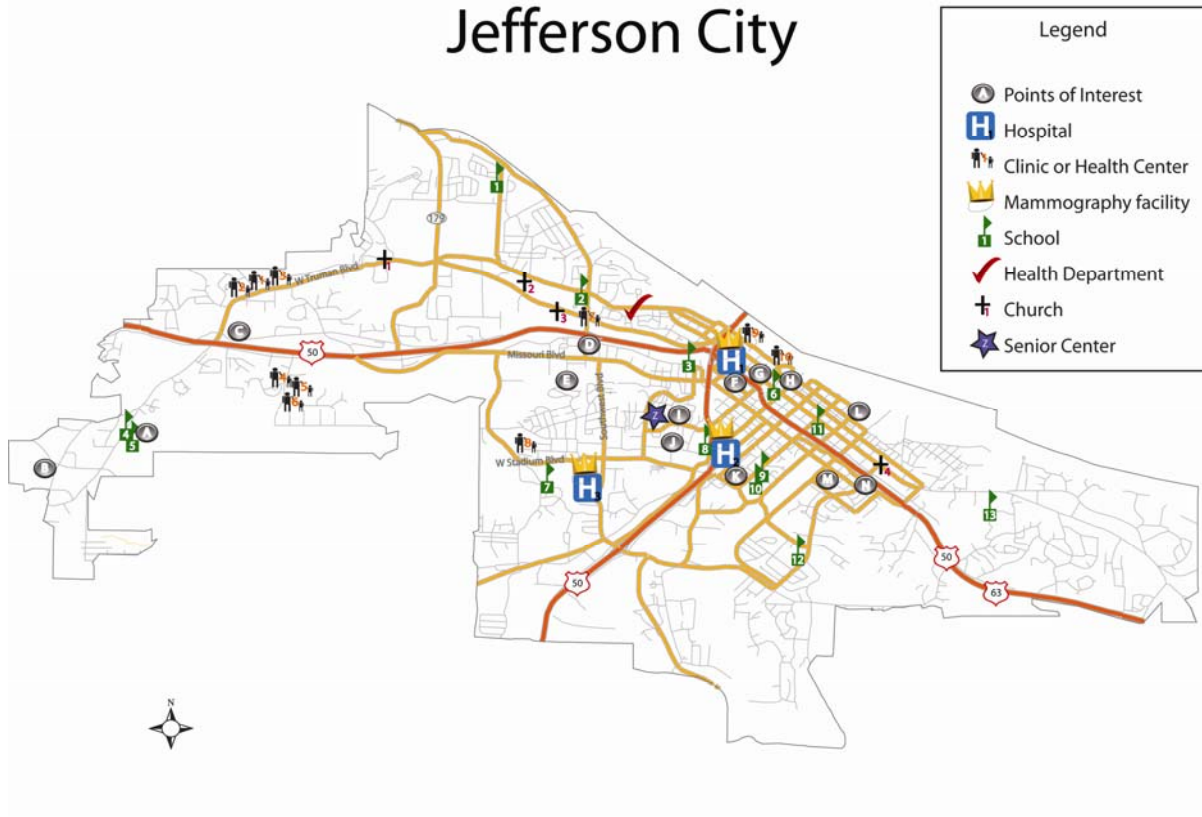


Figure 12. Locations of key places within Jefferson City, Cole County

Jefferson City Extended Legend

Hospitals**All with Mammography Centers**

- | | | | |
|---|--|---|-------------------------------|
| 1 | St. Mary's Hospital | 2 | Capital Region Medical Center |
| 3 | Capital Region Medical Center, Capital Region Southwest Campus | | |

Senior Center

- | | |
|---|----------------------|
| Z | Clarke Senior Center |
|---|----------------------|

Points of Interest

- | | | | |
|---|--------------------------------------|---|--|
| A | Special Learning Center | B | Breast Cancer Support Group (ETC) |
| C | Senior @ the Mall | D | Cole County Community Action /Central MO Community Action-Family Resource Center |
| E | American Cancer Society/MO/JC Office | F | St. Mary's Cancer Specialists |
| G | JC Housing Authority | H | MO Women's Council |
| I | Westminster Heritage Sr. Ctr. | J | EL Puente Hispanic Ministry- Mid-MO |
| K | Prenger Family Center | L | Community Breast Care Project |
| M | Women's Health Council | N | Refugee Resettlement and Immigration |

Clinic or Health Centers

- | | | | |
|----|--|----|--|
| 1 | Capital Region Health Branch West | 2 | Correctional Med. Services |
| 3 | Associated Family Physicians | 4 | Pathways Communication Behavioral Healthcare |
| 5 | Center for Emergency Response & Ter. | 6 | MO Primary Care Association |
| 7 | Community Health Ctr. Of Central MO-JC | 8 | Women's Healthcare |
| 9 | MO Academy of Family Physicians | 10 | MO family Health Council |
| 11 | University Physicians JC | 12 | Physicians Imaging LLC |

Schools

- | | | | |
|----|-----------------------------|----|-----------------------------|
| 1 | Belair Elementary | 2 | West Elementary |
| 3 | Southwest Elementary | 4 | Clarence Lawson Elementary |
| 5 | Thomas Jefferson Middle | 6 | Simonsen Ninth Grade Center |
| 7 | Cedar Hill Elementary | 8 | South Elementary |
| 9 | Thorpe J. Gordon Elementary | 10 | Nicholas Career Center |
| 11 | East Elementary | 12 | Moreau Heights Elementary |
| 13 | Lewis and Clark Elementary | | |

Churches

- | | | | |
|---|------------------------------|---|---------------------------------------|
| 1 | Schumate Chapel (historical) | 2 | Carmelite Monastery |
| 3 | Faith Lutheran Church | 4 | Immaculate conception Catholic Church |

Morgan County

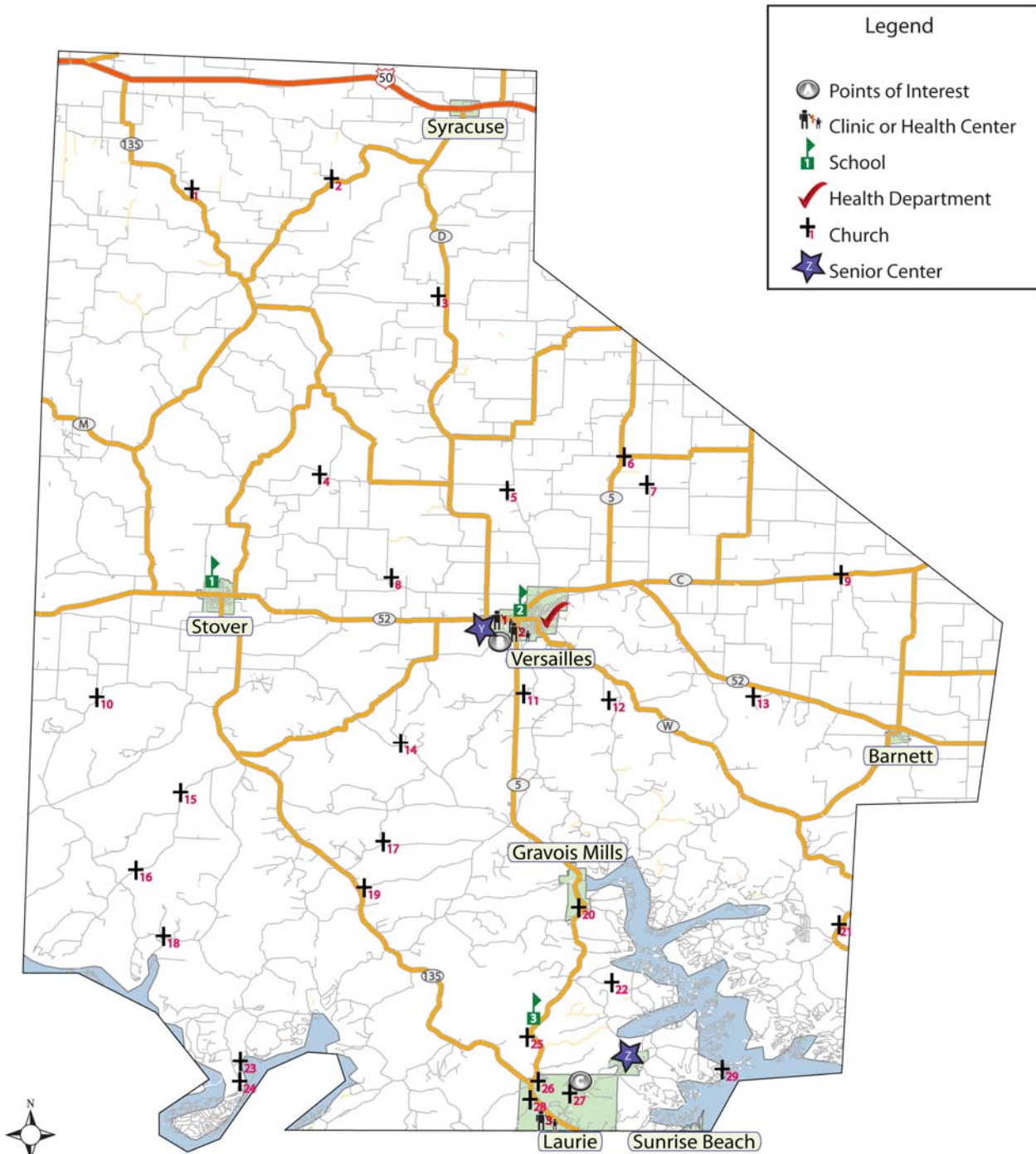


Figure 13. Locations of key places within Morgan County

Morgan County Extended Legend

Points of Interest

A Good Shepard Care Center B Laurie Care Center

Senior Centers

Y Versailles Senior Center Z West Side Senior Center

Clinics or Health centers

1 St. Mary's Versailles Medical Clinic 2 Capital Region Medical Clinic
3 Westlake Medical Center

Schools

1 Morgan Co. R-I Elementary 2 Morgan Co. Elementary
3 Morgan Co. South Elementary

Churches

1	Bethlehem	2	Mount Olive
3	Mount Carmel	4	Bethlehem (2)
5	Freedom (Historical)	6	Prairie View
7	Mount Zion	8	Mount Nebo
9	Hopewell	10	Pleasant Union
11	West Union	12	Church Oak
13	Big Rock	14	Richie
15	Mount Calvary	16	Trinity Chapel
17	Locus	18	Little Buffalo
19	New Bethel	20	Saint Patricks
21	Union	22	Community Chapel
23	Christian Church of the Ozarks	24	Ivy Bend Mission
25	Evansview Church of Christ	26	Shrine of Saint Patrick
27	Saint Patricks	28	Ozark Chapel
29	Millstone		

Summary

All the targeted counties had many churches suggesting a large percentage of the population worship. Forming partnerships with faith-based communities may provide an opportunity to spread the word about the importance of breast health, modifiable risk factors and getting annual mammograms. Three of the counties had ShowMe Healthy Women programs within their Health Department. Chariton County did not have this program.

Cole County is the seat of the state capital. Many of Cole County residents are employed by governmental agencies at all levels including local, county, state and federal. Most of these jobs remain in place during times of economic downturn although vacant positions are not filled which can add to workload. A large active state health department services Cole county as well as acting as the hub for the county health departments. For unknown reasons the rate of breast cancer is high in this county as is the breast cancer mortality rates. In contrast, the percent of *in situ* breast cancer is at the state average.

Chariton County is a sparsely populated county with its largest incorporated area of 1,700 people. Many residents travel more than 60 miles for their health needs so it may be easy for other obligations to supersede routine health care practices such as getting an annual mammogram. Although Chariton has a Federally Qualified Health Center, it sees only one patient per week who cannot pay; this policy creates a lengthy wait list.

Camden County has undergone tremendous change in the makeup and characteristics of its population from the time of initial settlement until today. Its population rebounded from a continuous decline with the construction of the Lake of the Ozarks, a popular summer destination. The Lake of the Ozarks is considered to be one of the best boating lakes in the Midwest and the Lake of the Ozarks Convention and Visitors Bureau report five million people visiting each year. Camden is a service-based economy which is influenced by the economic climate. While the nation grays, Missouri grays faster and Camden County faster still. The older population concentrates around the Lake with few services available, especially to this population.

Morgan County adjoins Camden County and enjoys a similar tourist trade. It also has a growing retiree population. The northern part of the county is dominated by farmland and is home to a significant Mennonite population. In a focus group study completed in March 2007, participants noted persistent pockets of poverty in the County. There are limited health care services in Morgan County. Residents need to travel to Jefferson City, Columbia or the Lake of the Ozarks for tests and specialty services. Older residents face transportation issues due to the distance.

Breast Cancer Resource Directory

At the direction of Susan G. Komen for the Cure Headquarters, we have not completed a Breast Cancer Resource Directory for the 2009 Community Profile process. However, we have two interns from the University of Missouri Master's of Public Health Program who will be working approximately 40 hours per week for the summer (May 15 – Aug 28) to compile the information. We plan on gathering data from all of our counties. With support from headquarters, we plan to create a dynamic resource directory for the website with triggers embedded into the system to prompt timely updates on information. The paper copy will be designed to maximize usability. During our data collection phase, we will be able gather information from key informants about the likely places that we should place hard copies of the resource manual for easy access by those seeking information.

Partnerships and Grant Opportunities

Since 2006 when the Komen Mid-Missouri Affiliate was formed, the major foci have been focused on tapping into potential partners in Columbia, Missouri. This is the home county of the founders and board members. However, this trend is shifting as can be observed in the location of institutions who have been awarded grants.

The top funding priority for the Affiliate's community-based grants program remains constant: to ensure that all women regardless of their ability to pay have access to annual screening mammograms, diagnostic services when a breast abnormality is identified and treatment if diagnosed with breast cancer. Our second funding priority is for comprehensive breast health care education that provides education and outreach to uninsured working poor and minorities to increase awareness about breast cancer, screening guidelines, breast self exams, and lifestyle choices as well as available community-based breast healthcare services which facilitate successful access into the breast health care system when needed.

Below is a list of the programs that have been supported by the Mid-Missouri Affiliate. Although it may seem that only women in Boone County were supported by Mid-Missouri Affiliate grants, this is not the case. Mid-Missouri Affiliate has supported for three grant cycles the only mobile mammography van that services our area. Those women who come to Ellis Fischel are from the Mid-Missouri region, not just Boone County. Nevertheless, the Mid-Missouri Affiliate Grants Committee has made concerted efforts to encourage all eligible organizations or institutions to apply for funds. This has been facilitated through the work of the community profile task. During interviews for the community profile, we informed key informants about our grant program and that we had money available "for the asking." Success in spreading the work is demonstrated by the first cycle of 2009 awards with 50 percent of the grants going to institutions located outside of Boone County. In 2009 cycle two of the grant applications process, over half of the organizations submitting grant applications attended our grant writing workshop and are located outside of Boone county. Cycle 2 grant applications were submitted from institutions in Adair, Cole, and Audrain counties as well as Boone county. We are clearly moving towards engaging all eligible organizations throughout our service area. Hand-in-hand with funding programs comes the building of strong relationships throughout our service area.

Below is the complete list of the grants awarded since Mid-Missouri Affiliate began its grant program:

2007

- Ellis Fischel Cancer Center: support of the mammography mobile van to rural communities
- Ellis Fischel Cancer Center: outreach program which focused on minority women in Columbia
- Ellis Fischel Cancer Center: produce an educational video on treatment options
- Ellis Fishel Cancer Center: educate women about lymphedema
- University of Missouri-Center for Health Care Quality: explore rural breast cancer survivors' and primary care provider's understanding and management of late treatment effects

All of the grantee organizations are located in Boone county.

2008

- Ellis Fishel Cancer Center: support of the mammography mobile van to rural communities
- Ellis Fischel Cancer Center: lymphedema therapy supply fund for breast cancer survivors
- University of Missouri-Center for Health Care Quality: expand on 2007 grant and develop guidelines for survivorship care to breast cancer survivors
- University of Missouri-Sinclair School of Nursing: establish a Distinguished Lectureship program in breast cancer awareness and survivorship to speak at various venues

All of the grantee organizations are located in Boone county.

2009 Cycle One

- Ellis Fischel Cancer Center: lymphedema therapy supply fund for breast cancer survivors
- Ellis Fischel Cancer Center: support of the mammography mobile van to rural communities
- Lake Regional Hospital (Osage Beach): educational program for breast cancer survivors
- Audrain Medical Center (Mexico, MO): educational program targeting African-American community

Two grantees organizations are located in Boone county; one is in Camden county and one is in Audrain county.

2009 Cycle Two

- Grant cycle to begin in June 30th 2009; awards to be announced in June 2009.

Public Policy Perspectives

The three Missouri Komen Affiliates, Komen St. Louis, Komen Greater Kansas City and Komen Mid-Missouri, have formed the Susan G. Komen for the Cure Missouri Public Policy Collaborative. The Affiliates work in tandem to address critical public policy issues. In addition, a Mid-Missouri Affiliate volunteer is a member of the Advisory Board for the Show Me Healthy Women (Missouri BCCCP) Program. The Komen Mid-Missouri Affiliate's Public Policy efforts have focused primarily on Missouri's BCCCP program, ShowMe Healthy Women (SMHW).

In 1990, the U.S. Congress passed the Breast and Cervical Cancer Mortality Prevention Act, which authorized the Centers for Disease Control (CDC) to establish the National Breast and Cervical Cancer Early Detection Program (NBCCEDP). Funded at \$30 million dollars in 1991, it has grown into a nationwide program with an appropriation of \$182 million in FY 2008 for breast and cervical screening.

In October 2000, the U.S. Congress passed the Breast and Cervical Cancer Prevention Treatment Act (BCCT), which provides Medicaid coverage to eligible women screened and diagnosed with breast or cervical cancer by the NBCCEDP Program. The Missouri Department of Health (subsequently changed its name to Department of Health and Senior Services) submitted its original grant application to CDC for funding to establish the Missouri Breast and Cervical Cancer Control Program (BCCCP) in 1991. It received its initial approval and began providing breast and cervical screening in December 1992. Currently, in the state of Missouri funding for screening mammograms for uninsured women comes through the SMHW program and the Missouri Women’s Council Pink License Plate Program. The Komen Missouri Affiliate provides funding for screening and diagnostics for uninsured or underserved women and parallels the efforts of the State.

Age Guidelines for SMHW

- Women Age 40 to 64 or older without Medicare Part B:
 - Are eligible for a clinical breast examination (CBE), and mammogram, plus a pelvic exam and Pap test*.
- Women Age 35-39 (Providing no other funding source is available):
 - Are eligible for a pelvic examination and Pap test* and CBE.
 - Are eligible for diagnostic breast services if the CBE results are suspicious for cancer.
 - Are eligible for diagnostic cervical services if their initial/follow-up cervical cancer screening (Pap test*) was abnormal and was provided by a participating provider or through outside referrals with Pap test* results of High Grade SIL or worse.
- Women who have had a Hysterectomy:
 - Due to cervical cancer or dysplasia are eligible for CBE, BSE instruction, pelvic exam and Pap test*.
 - Due to any reason other than cervical cancer or dysplasia are eligible for one (1) Pap test* and pelvic exam to determine the absence or presence of the cervix.
 - Due to conditions other than cervical cancer or dysplasia and the cervix is absent are eligible for a CBE.

Income Guidelines for SMHW

Table 2. Income guidelines for SMHW program			
Size of household	SMHW Annual	SMHW monthly	SMHW weekly
1	\$20,800	\$1,733.00	\$400.00
2	\$28,000	\$2,333.00	\$538.00
3	\$35,200	\$2,933.00	\$677.00
4	\$42,400	\$3,533.00	\$815.00
5	\$49,600	\$4,133.00	\$954.00
6	\$56,800	\$4,733.00	\$1,092.00
7	\$64,000	\$5,333.00	\$1,231.00
8	\$71,200	\$5,933.00	\$1,369.00
Each additional person, add:	\$7,200	\$600.00	\$138.00

Source: Federal Register, Vol. 73, No. 15, January 23, 2008
<http://aspe.hhs.gov/poverty/08poverty.shtml>

++Women with MO HealthNet, Medicare Part B or HMO health coverage are not eligible for SMHW.

*If cancer treatment is required it must be provided in state of residence. All states will accept referrals from the SMHW program into their cancer treatment programs.

#Undocumented residents are not eligible for cancer treatment through Missouri's MO HealthNet Breast and Cervical Cancer Treatment (BCCT).

**After the third consecutive negative (Normal) Pap test within a 5-year period (60 months), SMHW will reimburse for a regular Pap test in 3 years. However, the clinician's discretion may override this guideline.

Estimation of Eligible Women

The Missouri Medicaid program is called MOHealthNet, which is managed by the Department of Social Services. After utilizing the SMHW program and more follow-up care is needed, the provider fills out a form for a presumptive MOHealthNet authorization number. These forms are processed at the DSS office in Buchanan county for all providers. The presumptive number will expire unless the woman is diagnosed with cancer. If a woman is diagnosed with cancer, the patient will fill out a complete application to establish a permanent MOHealthNet card for treatment under the Breast and Cervical Cancer Treatment Act. Table 3 provides general estimates of eligible women in Missouri.

Table 3. Estimates of Missouri Women at Less Than 185% and 200% of Federal Poverty Level Comparison of the Comparison of the MO HealthNet and NBCCEDP Eligible Populations for Missouri in 2007 Breast and Cervical Cancer Screening, Ages 18 - 64

Program Relevant Age Groups for MO Females		Totals			Income-to-Poverty Ratio in 2007					
		below 200%			below 185%			185% to 200%		
		Totals	Health Insurance Coverage in 2005		Totals	Health Insurance Coverage in 2005		Totals	Health Insurance Coverage in 2005	
Insured	Uninsured		Insured	Uninsured		Insured	Uninsured			
Program	Age									
MO HealthNet	18 to 64	535,012	336,586	198,425	473,237	298,929	174,308	61,775	37,657	24,117
MO HealthNet	18 to 34	270,725	164,261	106,464	240,091	148,871	91,220	30,634	15,390	15,244
MO HealthNet	35 to 55	174,630	111,999	62,630	154,140	96,063	58,076	20,490	15,936	4,554
SMHW	35 to 64	264,287	172,325	91,962	233,146	150,058	83,088	31,141	22,267	8,874
SMHW	35 to 39	50,897	34,212	16,686	46,783	30,097	16,686	4,114	4,115	0
SMHW	40 to 49	93,783	60,941	32,843	83,202	51,832	31,370	10,581	9,109	1,473
SMHW	50 to 55	29,949	16,847	13,102	24,155	14,135	10,021	5,794	2,712	3,081
SMHW	56 to 64	89,658	60,326	29,331	79,006	53,994	25,012	10,652	6,332	4,319

Source: U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplement, 2007
http://www.census.gov/hhes/www/cpssc/apm/cpssc_alt pov.html [accessed Jan 9, 2009]

Both the federal and state programs have proven successful. According to the Missouri Department of Health and Senior Services (DHSS), approximately 92,000 Missouri women meet age and income requirements for SMHW. Data from DHSS indicates that 9,712 women received SMHW services from

June 2007 to June 2008. During these visits, 8,624 clinical breast exams were performed, 5,889 mammograms were completed, and 3,638 diagnostic services were provided, resulting in 176 breast cancer diagnoses, 139 of which were invasive and 37 cancer in situ.

Table 4. Estimated number of women aged 35-64 eligible for SMHW services

County	MO women, age 35-64		MO women 35-64, unins+below 200%		Percent 2007
	2006	2007	est_2006	est_2007	
Adair	3,802	3,793	280	277	7.3%
Audrain	5,560	5,525	441	423	7.7%
Boone	26,851	27,488	2,063	2,103	7.7%
Callaway	8,262	8,359	623	618	7.4%
Camden	8,541	8,477	630	614	7.2%
Chariton	1,597	1,580	121	116	7.4%
Cole	14,587	14,704	1,116	1,103	7.5%
Cooper	3,129	3,136	238	232	7.4%
Howard	1,848	1,843	143	138	7.5%
Macon	3,069	3,054	230	224	7.3%
Maries	1,808	1,783	133	129	7.2%
Miller	4,687	4,717	345	342	7.2%
Moniteau	2,613	2,622	193	190	7.3%
Morgan	3,976	3,961	293	287	7.3%
Randolph	4,591	4,626	347	343	7.4%
Total		95,668		7,141	7.5%
Osage	2,508	2,501	185	181	7.2%

Table 4 shows county level estimates of the population eligible for Show Me Healthy Women (SMHW) breast and cervical cancer screening programs. The SMHW eligible population includes uninsured women, aged 35-64, and living below 200% of federal poverty level (FPL). These estimates are based on county population estimates from the Missouri Population MICA <http://www.dhss.mo.gov/PopulationMICA/>, which uses estimates from the U.S. Census Bureau, and the U.S. Census Bureau's Table Creator, which accesses Current Population Survey (CPS) data http://www.census.gov/hhes/www/cpssc/cps_table_creator.html. Each county's population estimate is weighted according to estimated numbers of three racial groups (black, white, other) residing in the county. Those numbers are themselves weighted by the statewide proportion of each racial group estimated in the CPS to be uninsured and living below 200% of FPL.

For example, for 2007, Cole County is estimated to have a population distribution of approximately 92.3% white, 6% black, and 1.7% other racial groups. The CPS estimates approximately 7.2% of white, 11.3% of black, and 10.5% of other women, aged 35-64, are uninsured and living below 200% of FPL in Missouri. The estimated population of all women aged 35-64 in Cole County is 14,587, in 2007. Therefore, the Excel formula estimation would read as follows:

$$((14,587*0.923)*0.072)+((14,587*0.06)*0.113)+((14,587*0.017)*0.105) = 1,103$$

Note that the “7.2% of white, 11.3% of black, and 10.5% of other women” part will be the same for all counties. What varies in the formulae are the population proportions by racial group.

This method of estimation accounts, to some extent, for racial disparities in income and access to health insurance, but assumes that the demographic and economic characteristics of Cole (or any) county are not substantially different from the state as a whole. In fact, counties' actual rates of uninsured and poverty status may differ widely from the statewide rate. Inaccuracies are likely to be greater for counties with smaller populations.

Funding for SMHW

In 1992, the state approved \$250,000 of general revenue funds for the SMHW program. That amount had dwindled to \$70,000 in 2006. In 2007, Komen St. Louis led the Missouri Komen Public Policy

Collaborative in obtaining \$500,000 from the core general revenue budget for this program. In 2008, it was successful in obtaining an additional one-time appropriation of \$500,000 for the SMHW program. This, in combination with the annual \$3 million grant from the CDC, provided greater access to breast and cervical screening in Missouri. In 2009, with the economic downturn in the state, the Affiliates are working to retain the \$500,000 appropriation in the core general revenue budget. For example, Komen had a presence at the capital in March and met with legislators about supporting the breast health needs of their constituents.

A major issue that needs to be addressed is the need to change the State of Missouri from one of the most restrictive states for access to breast cancer treatment dollars to an Option three state which would permit full access to treatment dollars for all eligible women. In Missouri, the door you enter for the diagnosis of breast cancer matters if you are uninsured or low income. In Missouri if a woman is not diagnosed through a BCCCP provider, she cannot access coverage for breast cancer treatment through BCCT. This is a critical public policy issue and considered a priority for continued dialogue and attention in subsequent legislative sessions, which the St. Louis Affiliate is championing and the Komen Mid-Missouri Affiliate supports.

Exploratory Data

The Community Profile process completed by the Komen Mid-Missouri Affiliate included a review of breast cancer statistics for the entire area with comparative analysis by county. A focus on four counties (Cole, Morgan, Camden, and Chariton) was also completed. In these counties, numerous interviews to individual key informants and in groups were conducted. We also received completed surveys through emails linked to our web-based surveys, in person, and mailed surveys.

Methodology

Initially, three surveys were developed using both electronic and paper versions, the surveys targeted breast cancer survivors, providers, and the general public. The electronic surveys were posted on SurveyGizmo, an online survey development, collection, and analysis tool. We emailed a small number of survivors who attended the Greater Kansas City Race for a Cure event and lived in our Affilate area the online survey (n=15); these emails were provided to us by Greater Kansas City Affiliate. A hospital administrator in Cole county emailed our request and link to the survey to health professions who work at one HMO (approximately n = 25). We also collected data in person using our surveys from different groups. These included participants at a fund-raising event sponsored by a Jefferson City breast cancer survivor group “Encouragement Through Caring” (ETC) (n=208), ETC’s Survivor’s meeting (n=20), Jefferson City Medical Group’s monthly physician’s meeting (n=16), participants who reside in Dooley and Hamilton Tower: a low income housing apartment complex (n=7) and Hyder Apartments: low income housing for seniors, who were survivors (n=7). We also used questions from these surveys during our key informants’ (n=15) and providers’ (n=10) interviews throughout the four targeted county areas. In total, we contacted approximately 340 individuals within Cole, Chariton, Camden, and Morgan counties in an effort to gain first person opinions regarding future resource and energy allocations to increase breast health in the Mid-Missouri affiliate region.

Exploratory Data Findings from Surveys

At the ETC fund-raising event, the majority of women resided in Cole county (66%) with almost all the remaining coming from the surrounding counties of Moniteau, Morgan, Miller, Maries, Osage, Callaway, Boone (33%). For the data collected at the ETC fund raising event (n=202), women ranged in age from under 40 (36%), 41-49 (27%), 50-59 (27%), ≥ 60 (10%); 96% were White and 3% were Black. Over half of the women were married (65%), with 21% single, 12% divorced or separated and 3% widowed. Of the 202 participants, 12% did not report having a primary care physician and 10% of the participants reported not being able to see a physician because of cost. Of the 54 women between 50-59 years old, 9% had never had a mammogram. Of the 153 respondents who answered the question about perceived difficulty in obtaining a mammogram, only 5% reported getting a mammogram as difficult or very difficult.

Survivors were asked to indicate the support service they found *most helpful*. The choices were breast prosthetics, complementary therapies, counseling, exercise programs, financial assistance, lymphedema services, nutrition and/or food delivery, patient navigator services, referrals to outside agencies, religious and/or prayer groups, resource centers/libraries, support groups and/or other survivors, transportation, and wigs and/or hats. All services were marked by at least one person, except for transportation, patient navigator services and complementary therapies; these received no votes. Services that were considered the most helpful were support groups or other survivors (28%), wigs and/or hats (15%), lymphedema services (10%) and 8% for breast prosthetics, resource centers/libraries, and religious and/or prayer groups.

One question was asked of our different groups, “With the goal of eliminating breast cancer, where do you think energy and resources should be directed?” As depicted in Table 5 and Figure 14, Mammograms & Clinical Breast exams (at 68%), Breast Cancer Awareness (at 52%) and Breast Cancer Education (at 46%) were the three top priorities of our surveyed individuals. The providers had slightly different priorities with financial assistance during treatment (52%), mammograms and clinical breast exams (48%) and prescription assistance (44%) consistently ranked as the top three areas. It may be that the physicians, who interact with the range of patient population, are exposed to those in need and find limited services available. Further, the survivors and the general public responses may be biased since we collected most of these data at a fund raising event which cost \$10 to attend. The key informant data was not included in the table; however, our findings from those interviews are elaborated in the next section.

Table 5. Responses to the question “With the goal of eliminating breast cancer, where do you think energy and resources should be directed?” Respondents could select up to 3 areas.

Table 5: Selection of areas for Mid-Missouri Affiliate to focus its resources by different groups						
	Providers	Survivors	General public	Participants Living in Low Income Housing	Total	Percent
n=	27	35	185	14	261	
Mammograms & Clinical Breast Exams	13	23	128	13	177	68%
Breast Cancer Awareness	6	19	103	8	136	52%
Breast Cancer Education	7	17	87	9	120	46%
Financial Assistance during treatment	14	10	65	4	93	36%
Prescription Assistance	12	9	30	5	56	21%
Accessories during treatment	4	4	25	3	36	14%
Professional education for nurses and doctors	3	4	15	3	25	10%
Lymphedema treatment	5	4	14	3	26	10%
Lymphedema garments and supplies	2	3	7	4	16	6%

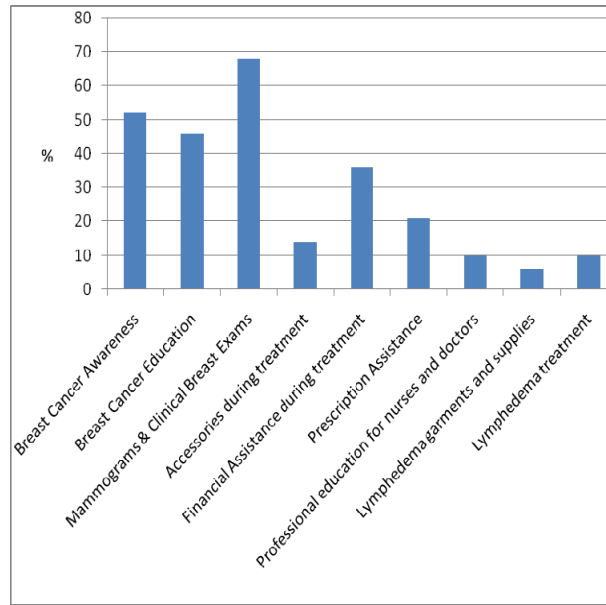


Figure 14: Graphical representation of where individuals believe energy and resources should be directed for the future elimination of breast health.

We also interviewed key informants and health care providers in our targeted counties. Below are summaries of these interviews.

Exploratory Data Findings from In-person interviews

- One of our major discoveries we made from our interviews was that directors/managers of outreach programs, who interacted with underserved/uninsured/impooverished populations and managers of programs that provided resources to these same populations were often unaware of each other; this held for programs within the same county and even located in the same city.
- The findings from the health department/agencies discussion seem to support the data from the asset mapping, which noted that many of the Affiliate’s rural counties are lacking permanent mammography facilities. The discussion showed that at least some of these rural health departments rely on mobile vans to provide mammography services. The Ellis Fischel Mobile Van, which is partially supported by a Mid-Missouri Affiliate grant, was frequently cited as a wonderful resource as well as the only resource for mammography screening available to some counties.
- Another common discussion point was the current economic climate and its impact. There was a fear that those who were doing just okay would move into the category of needing assistance but would not qualify for the existing programs. People in rural communities who have catastrophic insurance or very high deductibles will be unlikely to obtain a mammogram during this period of belt tightening.
- The physicians are beginning to see more patients who have lost their jobs and an increase in self-pay. Urgent care walk-in have increased which suggests that people are only receiving care in urgent situations. Currently, some clinics are recommending people call in before their

appointment with their insurance information so that the health care team knows what is covered and what their patients can afford before scheduling procedures or tests.

- All of the health departments spoke of being stretched and having competing priorities as part of their job duties. In Chariton County, it was noted that one person is in charge of 5-7 programs that all demand considerable time. To implement a new program means writing a grant, this takes time in an already packed workday.
- Another concern mentioned by several informants was a lack of transportation for rural residents. For the senior citizen groups, that meant no transportation to the mobile mammography van. For others that translated into lack of transportation for treatment, particularly when it was a frequent repeat appointment.
- Interviewees mentioned several barriers that minorities may face in obtaining breast health care in the predominately white communities of the Mid-Missouri Affiliate Area. One barrier is the lack of similarly colored individuals providing breast health care. This is compounded by few female health care providers in our region. Finally, there is a common myth that breast cancer is a white woman's disease and therefore not germane to Black women.

Conclusions

Combining the qualitative data from the targeted profiles with the breast cancer statistics determined the priorities for the Komen Mid-Missouri 2009 Community Profile.

Selecting Affiliate Priorities

After reviewing the data, the community profile team made recommendations to the Board of Directors. The Board of Directors discussed the initial recommendation at the March Board meeting and approved the following slate at the April meeting. All objectives will be accomplished in fiscal year 2009 unless otherwise indicated. The priorities and objectives are listed below.

Affiliate Priorities

1. Continue Komen Mid-Missouri Affiliate efforts to increase breast health care outreach and education, breast cancer screenings and diagnostics, and quality breast health care services for uninsured/underserved women.
2. Increase awareness of the Komen organization in the Mid-Missouri Affiliate area, especially the funding opportunities available to organization.
3. Continue Public Policy Initiatives to insure adequate funding for Missouri's SMHW Program and explore opportunities to address BCCT access.

Affiliate Action Plan

Priority 1: Continue Komen Mid-Missouri Affiliate efforts to increase breast health care outreach and education, breast cancer screenings and diagnostics, and quality breast health care services including uninsured/underserved people.

Objective 1: Establish a local Pink Promise Committee in each county that will lead a team of residents to assist with outreach effort, particularly targeted to their county.

Objective 2: Support a half-day event, at mid-year of the grant cycle, in which grantees are required to attend to present their work. The focus of the meeting would be to increase networking, minimize duplication of mistakes and create a working group of experts that others can utilize.

Objective 3: Support grant application(s) in providing services to those women who are in need of breast health services but do not qualify for the existing programs. Eligibility criteria will need to be approved by the Komen Mid-Missouri Affiliate Board of Directors before the posting of the next Request for Application.

Priority 2: Increase awareness of the Komen organization in the Mid-Missouri Affiliate area, especially the funding opportunities available to organizations.

Objective 1: Hold yearly grant writing workshops at locations outside of Columbia (Boone County) to encourage organizations in all our counties to submit applications for Komen funds to provide services to their communities.

Objective 2: A resource manual will be compiled that describes each county's breast health resources.

Objective 3: Support grant applications that focus on prevention of modifiable risk factors such as alcohol consumption, physical activity, stress reduction, and weight using a variety of tools.

Priority 3: Continue Public Policy Initiatives to maintain support for Missouri's Show Me Healthy Women Program and explore opportunities to address BCCT access Issues.

Objective 1: Continue the ongoing dialogue with Department of Health and Senior Services and Department of Social Service's staff to identify opportunities to move Missouri to an Option 3 BCCT access state.

Objective 2: Maintain an active voice on the Show Me Healthy Women Advisory Board.

RESOURCES

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Missouri Department of Health and Senior Services, Show Me Healthy Women Newsletter, Fall-Winter 2008-2009, <http://www.dhss.mo.gov/BreastCervCancer/Publications.html>

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